



January 17, 2007

**STL Sacramento**  
880 Riverside Parkway  
West Sacramento, CA 95605

Tel: 916 373 5600  
Fax: 916 372 1059  
[www.stl-inc.com](http://www.stl-inc.com)

**STL SACRAMENTO PROJECT NUMBER: G6L200192**  
PO/CONTRACT: 129682.001/Event 113

Guy Graening  
Brown and Caldwell  
10540 White Rock Road  
Suite 180  
Rancho Cordova, CA 95670

Dear Mr. Graening,

This report contains the analytical results for the samples received under chain of custody by STL Sacramento on December 20, 2006. These samples are associated with your 21243 project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4384.

Sincerely,

A handwritten signature in black ink, appearing to read "Karen Dahl".

Karen Dahl  
Project Manager

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AIR, PM-10

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## **CASE NARRATIVE**

**STL SACRAMENTO PROJECT NUMBER G6L200192**

### **General Comments**

Sample 1 was labeled 110206-812. Sample 2 was labeled 110206-813. Sample 3 was labeled 110206-814. Sample 4 was labeled 110206-815. Sample 5 was labeled 110206-580.

The sample identifications listed on the COC were used in the report.

There were no other anomalies associated with this project.

## STL Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	Oregon*	CA 200005
Arizona	AZ0616	Pennsylvania	68-1272
Arkansas	04-067-0	South Carolina	87014002
California*	01119CA	Texas	TX 270-2004A
Colorado	NA	Utah*	QUAN1
Connecticut	PH-0691	Virginia	00178
Florida*	E87570	Washington	C087
Georgia	960	West Virginia	9930C, 334
Hawaii	NA	Wisconsin	998204680
Louisiana*	01944	NFESC	NA
Michigan	9947	USACE	NA
Nevada	CA44	USDA Foreign Plant	37-82605
New Jersey*	CA005	USDA Foreign Soil	S-46613
New York*	11666		

\*NELAP accredited. A more detailed parameter list is available upon request. Update 1/27/05

## QC Parameter Definitions

**QC Batch:** The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank:** An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

**Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):** An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):** An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution:** For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

# Sample Summary

## G6L200192

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
JLVQR	1	P-0812	12/5/2006 12:25 PM	12/20/2006 09:30 AM
JLVQW	2	P-0813	12/5/2006 12:10 PM	12/20/2006 09:30 AM
JLVQ1	3	P-0814	12/5/2006 12:45 PM	12/20/2006 09:30 AM
JLVQ3	4	P-0815	12/5/2006 12:30 PM	12/20/2006 09:30 AM
JLVQ4	5	000580	12/5/2006 12:50 PM	12/20/2006 09:30 AM

### Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight

## BROWN AND CALDWELL

## CHAIN OF CUSTODY RECORD

COC No.

Event 113

3264 Goni Road / Suite 153  
Carson City, NV 89706  
775-883-4118 / FAX 775-883-5108

4425 W. Spring Mountain Road / Suite 225  
Las Vegas, NV 89102  
702-938-4080 / FAX 702-938-4082

201 East Washington Street / Suite 300  
Phoenix, AZ 85004  
602-567-4000 / FAX 602-567-4001

PROJECT NAME: Yerington Air Qly  
PROJECT NUMBER: 121243

LABORATORY NAME &amp; ADDRESS: SEVERN TRENT LABS, WEST SACRAMENTO,

LINE NO.	SAMPLE - I.D.	COLLECTION DATE	TIME	SAMPLES IN TIN TINS	NUMBER OF CONTAINERS	TYPE AND SIZE OF CONTAINER	PRESERVE	MATRIX CODE	ANALYSES REQUESTED		FIELD FILTERED	QC - REQ	SAMPLED	DEPTH (FT) BEGIN	DEPTH (FT) END	PID READING (ppm)																	
									TEST	TEST																							
- 01	P-0812	12/5/04	12:25	MS	1	8x10 Filter	NONE	A	PM-10, Gross Alpha, Th(228,230), Ra(226,228), Metals (Al,As,Cd,Cr,Co,Cu,Mn,Ni), Sulfate		0.24																						
- 02	P-0813	12/10			1	8x10 Filter	NONE	A	PM-10, Gross Alpha, Th(228,230), Ra(226,228), Metals (Al,As,Cd,Cr,Co,Cu,Mn,Ni), Sulfate		0.33																						
- 03	P-0814	12:45			1	8x10 Filter	NONE	A	PM-10, Gross Alpha, Th(228,230), Ra(226,228), Metals (Al,As,Cd,Cr,Co,Cu,Mn,Ni), Sulfate		0.27																						
- 04	P-0815	12:30			1	8x10 Filter	NONE	A	Fm-i6, Gross Alpha, Th(226,230), Ra(226,226), Metals (Al,As,Cd,Cr,Co,Cu,Mn,Ni), Sulfate		0.27																						
- 05	000580		12:56	↓	1	8x10 Filter	NONE	A	TSP, Gross Alpha, Th(228,230), Ra(226,228), Metals (Al,As,Cd,Cr,Co,Cu,Mn,Ni), Sulfate		0.22																						
- 06																																	
- 07	110206-812																																
08	1					- 8'3																											
08	2					- 8'4																											
09	3					- 8'5																											
09	4					- 5'80																											
10																																	
COLLECTED & RELEASED BY:		DATE: 12/19/04		TIME: 09:36		COOLER I.D.:		COMMENTS (see note on back)																									
RECEIVED BY:		DATE: 12/20/04		TIME: 10:00		RElinquished By:		DATE: / /		TIME: :		ENRQS Project #:		001KF-0043																			
RECORD RETURNED BY:		DATE: / /		TIME: :		SHIPPING NUMBER:		GOLDENROD - FIELD																									
COURIER:																																	
DISTRIBUTION: WHITE - PROJECT FILE • CANARY - LAB RECEIPT • PINK - DATA MANAGEMENT • GOLDENROD - FIELD																																	
USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK.																																	

CLIENT Brown & Caldwell PM KD LOG # 42803LOT# (QUANTIMS ID) G10L20192 QUOTE# 62684 LOCATION ACDATE RECEIVED 12/20/06 TIME RECEIVED 0930 Initials JW Date 12/20/06

DELIVERED BY  FEDEX  CA OVERNIGHT  CLIENT  
 AIRBORNE  GOLDENSTATE  DHL  
 UPS  BAX GLOBAL  GO-GETTERS  
 STL COURIER  COURIERS ON DEMAND  
 OTHER

CUSTODY SEAL STATUS  INTACT  BROKEN  N/A

CUSTODY SEAL #(S) \_\_\_\_\_

SHIPPING CONTAINER(S)  STL  CLIENT  N/ATEMPERATURE RECORD (IN °C) IR 1  3  OTHER N/A

COC #(S) \_\_\_\_\_

TEMPERATURE BLANK Observed: \_\_\_\_\_ Corrected: \_\_\_\_\_

## SAMPLE TEMPERATURE

Observed: Ambient Average: \_\_\_\_\_ Corrected Average: \_\_\_\_\_COLLECTOR'S NAME:  Verified from COC  Not on COCpH MEASURED  YES  ANOMALY  N/A

LABELED BY \_\_\_\_\_

LABELS CHECKED BY \_\_\_\_\_

PEER REVIEW  N/A

## SHORT HOLD TEST NOTIFICATION

## SAMPLE RECEIVING

WETCHEM  N/AVOA-ENCORES  N/A METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL  N/A COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES  N/A Clouseau  TEMPERATURE EXCEEDED (2 °C – 6 °C)\*  N/A WET ICE  BLUE ICE  GEL PACK  NO COOLING AGENTS USED PM NOTIFIEDNotes: Rec'd P-0812 labeled 110206-812P-0813  
P-0814  
P-0815  
000800-813  
-814  
-815  
-580

\*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

Lot

ID:

G6L200192

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
VOAh*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
AGB																				
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
CGJ																				
500CGJ																				
250CGJ																				
125CGJ																				
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJha																				
250PJzn/na																				
Acetate Tube																				
"CT																				
Encore																				
Folder/filter	/	/	/	/	/															
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

1 = hydrochloric acid   s = sulfuric acid   na = sodium hydroxide

n = nitric acid

zn = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

# AIR, 6020, Metals

Brown and Caldwell

Client Sample ID: P-0812

TOTAL Metals

Lot-Sample #....: G6L200192-001

Matrix.....: AIR

Date Sampled...: 12/05/06

Date Received...: 12/20/06

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 6360054						
Aluminum	258	240	ug	SW846 6020	12/26-12/28/06	JLVQR1AC
		Dilution Factor: 1		MDL.....: 120		
Arsenic	ND	2.9	ug	SW846 6020	12/26-12/27/06	JLVQR1AD
		Dilution Factor: 1		MDL.....: 0.89		
Cadmium	0.084 B	1.2	ug	SW846 6020	12/26-12/27/06	JLVQR1AE
		Dilution Factor: 1		MDL.....: 0.028		
Cobalt	ND	2.4	ug	SW846 6020	12/26-12/27/06	JLVQR1AF
		Dilution Factor: 1		MDL.....: 2.3		
Chromium	ND	2.9	ug	SW846 6020	12/26-12/28/06	JLVQR1AG
		Dilution Factor: 1		MDL.....: 2.3		
Copper	21.9	6.0	ug	SW846 6020	12/26-12/28/06	JLVQR1AH
		Dilution Factor: 1		MDL.....: 1.3		
Manganese	10.8	6.0	ug	SW846 6020	12/26-12/27/06	JLVQR1AJ
		Dilution Factor: 1		MDL.....: 2.0		
Nickel	ND	6.0	ug	SW846 6020	12/26-12/27/06	JLVQR1AK
		Dilution Factor: 1		MDL.....: 1.2		

NOTE(S) :

B Estimated result. Result is less than RL.

Brown and Caldwell

Client Sample ID: P-0813

TOTAL Metals

Lot-Sample #....: G6L200192-002

Matrix.....: AIR

Date Sampled...: 12/05/06

Date Received...: 12/20/06

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 6360054</b>						
Aluminum	277	240	ug	SW846 6020	12/26-12/28/06	JLVQW1AC
		Dilution Factor: 1		MDL.....: 120		
Arsenic	ND	2.9	ug	SW846 6020	12/26-12/27/06	JLVQW1AD
		Dilution Factor: 1		MDL.....: 0.89		
Cadmium	0.12 B	1.2	ug	SW846 6020	12/26-12/27/06	JLVQW1AE
		Dilution Factor: 1		MDL.....: 0.028		
Cobalt	ND	2.4	ug	SW846 6020	12/26-12/27/06	JLVQW1AF
		Dilution Factor: 1		MDL.....: 2.3		
Chromium	ND	2.9	ug	SW846 6020	12/26-12/28/06	JLVQW1AG
		Dilution Factor: 1		MDL.....: 2.3		
Copper	14.0	6.0	ug	SW846 6020	12/26-12/28/06	JLVQW1AH
		Dilution Factor: 1		MDL.....: 1.3		
Manganese	12.9	6.0	ug	SW846 6020	12/26-12/27/06	JLVQW1AJ
		Dilution Factor: 1		MDL.....: 2.0		
Nickel	ND	6.0	ug	SW846 6020	12/26-12/27/06	JLVQW1AK
		Dilution Factor: 1		MDL.....: 1.2		

NOTE(S) :

B Estimated result. Result is less than RL.

Brown and Caldwell

Client Sample ID: P-0814

**TOTAL Metals**

Lot-Sample #....: G6L200192-003

Matrix.....: AIR

Date Sampled...: 12/05/06

Date Received...: 12/20/06

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 6360054</b>						
Aluminum	553	240	ug	SW846 6020 Dilution Factor: 1	MDL.....: 120	12/26-12/28/06 JLVQ11AC
Arsenic	ND	2.9	ug	SW846 6020 Dilution Factor: 1	MDL.....: 0.89	12/26-12/27/06 JLVQ11AD
Cadmium	0.12 B	1.2	ug	SW846 6020 Dilution Factor: 1	MDL.....: 0.028	12/26-12/27/06 JLVQ11AE
Cobalt	ND	2.4	ug	SW846 6020 Dilution Factor: 1	MDL.....: 2.3	12/26-12/27/06 JLVQ11AF
Chromium	ND	2.9	ug	SW846 6020 Dilution Factor: 1	MDL.....: 2.3	12/26-12/28/06 JLVQ11AG
Copper	29.2	6.0	ug	SW846 6020 Dilution Factor: 1	MDL.....: 1.3	12/26-12/28/06 JLVQ11AH
Manganese	20.3	6.0	ug	SW846 6020 Dilution Factor: 1	MDL.....: 2.0	12/26-12/27/06 JLVQ11AJ
Nickel	1.2 B	6.0	ug	SW846 6020 Dilution Factor: 1	MDL.....: 1.2	12/26-12/27/06 JLVQ11AK

**NOTE(S) :**

B Estimated result. Result is less than RL.

Brown and Caldwell

Client Sample ID: P-0815

TOTAL Metals

Lot-Sample #....: G6L200192-004

Date Sampled...: 12/05/06

Matrix.....: AIR

Date Received..: 12/20/06

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #....: 6360054</b>						
Aluminum	292	240	ug	SW846 6020 Dilution Factor: 1	MDL.....: 120	12/26-12/28/06 JLVQ31AC
Arsenic	ND	2.9	ug	SW846 6020 Dilution Factor: 1	MDL.....: 0.89	12/26-12/27/06 JLVQ31AD
Cadmium	0.094 B	1.2	ug	SW846 6020 Dilution Factor: 1	MDL.....: 0.028	12/26-12/27/06 JLVQ31AE
Cobalt	ND	2.4	ug	SW846 6020 Dilution Factor: 1	MDL.....: 2.3	12/26-12/27/06 JLVQ31AF
Chromium	ND	2.9	ug	SW846 6020 Dilution Factor: 1	MDL.....: 2.3	12/26-12/28/06 JLVQ31AG
Copper	24.2	6.0	ug	SW846 6020 Dilution Factor: 1	MDL.....: 1.3	12/26-12/28/06 JLVQ31AH
Manganese	11.7	6.0	ug	SW846 6020 Dilution Factor: 1	MDL.....: 2.0	12/26-12/27/06 JLVQ31AJ
Nickel	ND	6.0	ug	SW846 6020 Dilution Factor: 1	MDL.....: 1.2	12/26-12/27/06 JLVQ31AK

**NOTE(S) :**

B Estimated result. Result is less than RL.

Brown and Caldwell

Client Sample ID: 000580

TOTAL Metals

Lot-Sample #....: G6L200192-005

Matrix.....: AIR

Date Sampled...: 12/05/06

Date Received...: 12/20/06

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 6360054</b>							
Aluminum	1030	240	ug	SW846 6020	MDL.....: 120	12/26-12/28/06	JLVQ41AC
		Dilution Factor: 1					
Arsenic	ND	2.9	ug	SW846 6020	MDL.....: 0.89	12/26-12/27/06	JLVQ41AD
		Dilution Factor: 1					
Cadmium	0.12 B	1.2	ug	SW846 6020	MDL.....: 0.028	12/26-12/27/06	JLVQ41AE
		Dilution Factor: 1					
Cobalt	ND	2.4	ug	SW846 6020	MDL.....: 2.3	12/26-12/27/06	JLVQ41AF
		Dilution Factor: 1					
Chromium	2.4 B	2.9	ug	SW846 6020	MDL.....: 2.3	12/26-12/28/06	JLVQ41AG
		Dilution Factor: 1					
Copper	80.5	6.0	ug	SW846 6020	MDL.....: 1.3	12/26-12/28/06	JLVQ41AH
		Dilution Factor: 1					
Manganese	37.2	6.0	ug	SW846 6020	MDL.....: 2.0	12/26-12/27/06	JLVQ41AJ
		Dilution Factor: 1					
Nickel	1.8 B	6.0	ug	SW846 6020	MDL.....: 1.2	12/26-12/27/06	JLVQ41AK
		Dilution Factor: 1					

NOTE(S) :

B Estimated result. Result is less than RL.

# QC DATA ASSOCIATION SUMMARY

G6L200192

## Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	AIR	SW846 6020		6360054	
002	AIR	SW846 6020		6360054	
003	AIR	SW846 6020		6360054	
004	AIR	SW846 6020		6360054	
005	AIR	SW846 6020		6360054	

## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #....: G6L200192

Matrix.....: AIR

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>MB Lot-Sample #: G6L260000-054 Prep Batch #...: 6360054</b>						
Aluminum	ND	240	ug	SW846 6020	12/26-12/28/06	JL4Q21AA
		Dilution Factor:	1			
Arsenic	ND	2.9	ug	SW846 6020	12/26-12/27/06	JL4Q21AC
		Dilution Factor:	1			
Cadmium	ND	1.2	ug	SW846 6020	12/26-12/27/06	JL4Q21AD
		Dilution Factor:	1			
Chromium	ND	2.9	ug	SW846 6020	12/26-12/28/06	JL4Q21AF
		Dilution Factor:	1			
Cobalt	ND	2.4	ug	SW846 6020	12/26-12/27/06	JL4Q21AE
		Dilution Factor:	1			
Copper	ND	6.0	ug	SW846 6020	12/26-12/28/06	JL4Q21AG
		Dilution Factor:	1			
Manganese	ND	6.0	ug	SW846 6020	12/26-12/27/06	JL4Q21AH
		Dilution Factor:	1			
Nickel	ND	6.0	ug	SW846 6020	12/26-12/27/06	JL4Q21AJ
		Dilution Factor:	1			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE DATA REPORT**

**TOTAL Metals**

**Lot-Sample #....: G6L200192**

**Matrix.....: AIR**

PARAMETER	SPIKE	MEASURED		PERCNT			METHOD	PREPARATION-	PREP
	AMOUNT	AMOUNT	UNITS	RECVRY	RPD	ANALYSIS DATE		BATCH #	
Aluminum	1200	1210	ug	100		SW846 6020		12/26-12/28/06	6360054
	1200	1170	ug	98	2.6	SW846 6020		12/26-12/28/06	6360054
Dilution Factor: 1									
Arsenic	240	213	ug	89		SW846 6020		12/26-12/27/06	6360054
	240	214	ug	89	0.61	SW846 6020		12/26-12/27/06	6360054
Dilution Factor: 1									
Cadmium	240	217	ug	90		SW846 6020		12/26-12/27/06	6360054
	240	216	ug	90	0.49	SW846 6020		12/26-12/27/06	6360054
Dilution Factor: 1									
Chromium	240	220	ug	92		SW846 6020		12/26-12/28/06	6360054
	240	212	ug	88	3.9	SW846 6020		12/26-12/28/06	6360054
Dilution Factor: 1									
Cobalt	240	219	ug	91		SW846 6020		12/26-12/27/06	6360054
	240	217	ug	90	0.86	SW846 6020		12/26-12/27/06	6360054
Dilution Factor: 1									
Copper	240	239	ug	99		SW846 6020		12/26-12/28/06	6360054
	240	230	ug	96	3.8	SW846 6020		12/26-12/28/06	6360054
Dilution Factor: 1									
Manganese	240	234	ug	97		SW846 6020		12/26-12/27/06	6360054
	240	235	ug	98	0.63	SW846 6020		12/26-12/27/06	6360054
Dilution Factor: 1									
Nickel	240	232	ug	97		SW846 6020		12/26-12/27/06	6360054
	240	232	ug	97	0.17	SW846 6020		12/26-12/27/06	6360054
Dilution Factor: 1									

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**TOTAL Metals**

**Lot-Sample #....: G6L200192**

**Matrix.....: AIR**

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	PREP-
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	BATCH #
Aluminum	100	(75 - 125)		SW846 6020	12/26-12/28/06	6360054
	98	(75 - 125)	2.6 (0-20)	SW846 6020	12/26-12/28/06	6360054
Dilution Factor: 1						
Arsenic	89	(75 - 125)		SW846 6020	12/26-12/27/06	6360054
	89	(75 - 125)	0.61 (0-20)	SW846 6020	12/26-12/27/06	6360054
Dilution Factor: 1						
Cadmium	90	(75 - 125)		SW846 6020	12/26-12/27/06	6360054
	90	(75 - 125)	0.49 (0-20)	SW846 6020	12/26-12/27/06	6360054
Dilution Factor: 1						
Chromium	92	(75 - 125)		SW846 6020	12/26-12/28/06	6360054
	88	(75 - 125)	3.9 (0-20)	SW846 6020	12/26-12/28/06	6360054
Dilution Factor: 1						
Cobalt	91	(75 - 125)		SW846 6020	12/26-12/27/06	6360054
	90	(75 - 125)	0.86 (0-20)	SW846 6020	12/26-12/27/06	6360054
Dilution Factor: 1						
Copper	99	(75 - 125)		SW846 6020	12/26-12/28/06	6360054
	96	(75 - 125)	3.8 (0-20)	SW846 6020	12/26-12/28/06	6360054
Dilution Factor: 1						
Manganese	97	(75 - 125)		SW846 6020	12/26-12/27/06	6360054
	98	(75 - 125)	0.63 (0-20)	SW846 6020	12/26-12/27/06	6360054
Dilution Factor: 1						
Nickel	97	(75 - 125)		SW846 6020	12/26-12/27/06	6360054
	97	(75 - 125)	0.17 (0-20)	SW846 6020	12/26-12/27/06	6360054
Dilution Factor: 1						

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

# AIR, 9056, Sulfate

Brown and Caldwell

Client Sample ID: P-0812

General Chemistry

Lot-Sample #....: G6L200192-001    Work Order #....: JLVQR    Matrix.....: AIR  
Date Sampled....: 12/05/06    Date Received...: 12/20/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Sulfate	0.42 B	0.48	mg	SW846 9056	12/26-12/27/06	6361402
		Dilution Factor: 12		MDL.....	: 0.048	

NOTE(S) :

RL Reporting Limit

B Estimated result. Result is less than RL.

Brown and Caldwell

Client Sample ID: P-0813

General Chemistry

Lot-Sample #....: G6L200192-002    Work Order #....: JLVQW    Matrix.....: AIR  
Date Sampled...: 12/05/06              Date Received...: 12/20/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Sulfate	0.59	0.48	mg	SW846 9056	12/26-12/27/06	6361402
		Dilution Factor: 12		MDL.....	.....: 0.048	

Brown and Caldwell

Client Sample ID: P-0814

General Chemistry

Lot-Sample #....: G6L200192-003    Work Order #....: JLVQ1    Matrix.....: AIR  
Date Sampled...: 12/05/06    Date Received...: 12/20/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Sulfate	0.54	0.48	mg	SW846 9056	12/26-12/27/06	6361402
		Dilution Factor: 12		MDL.....	0.048	

Brown and Caldwell

Client Sample ID: P-0815

General Chemistry

Lot-Sample #....: G6L200192-004    Work Order #....: JLVQ3    Matrix.....: AIR  
Date Sampled...: 12/05/06    Date Received...: 12/20/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Sulfate	0.49	0.48	mg	SW846 9056	12/26-12/27/06	6361402
		Dilution Factor: 12		MDL.....	0.048	

Brown and Caldwell

Client Sample ID: 000580

General Chemistry

Lot-Sample #....: G6L200192-005    Work Order #....: JLVQ4    Matrix.....: AIR  
Date Sampled....: 12/05/06    Date Received...: 12/20/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Sulfate	1.1	0.48	mg	SW846 9056	12/26-12/27/06	6361402
		Dilution Factor: 12			MDL.....: 0.048	

# QC DATA ASSOCIATION SUMMARY

G6L200192

## Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	AIR	SW846 9056		6361402	
	AIR	CFR50J APDX J		7002322	
002	AIR	SW846 9056		6361402	
	AIR	CFR50J APDX J		7002322	
003	AIR	SW846 9056		6361402	
	AIR	CFR50J APDX J		7002322	
004	AIR	SW846 9056		6361402	
	AIR	CFR50J APDX J		7002322	
005	AIR	CFR50B APDX B		7002321	
	AIR	SW846 9056		6361402	

**METHOD BLANK REPORT**

**General Chemistry**

**Client Lot #....:** G6L200192

**Matrix.....:** AIR

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>			<b>METHOD</b>	<b>PREPARATION-</b> <b>ANALYSIS DATE</b>	<b>PREP</b> <b>BATCH #</b>
		<b>LIMIT</b>	<b>UNITS</b>	<b>Work Order #:</b>			
Sulfate	ND	0.48	mg	JL60W1AA	MB Lot-Sample #:	G6L270000-402	12/26-12/27/06 6361402
		Dilution Factor: 12					

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE DATA REPORT

## General Chemistry

Lot-Sample #....: G6L200192

Matrix.....: AIR

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>		<u>PERCNT</u>			<u>PREPARATION-</u>	<u>ANALYSIS DATE</u>	<u>PREP</u>	
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECVRY</u>	<u>RPD</u>	<u>METHOD</u>				
Sulfate		WO#:JL60W1AC-LCS/JL60W1AD-LCSD						LCS	Lot-Sample#:	G6L270000-402
	4.80	4.69	mg	98		SW846 9056		12/26-12/27/06	6361402	
	4.80	4.72	mg	98	0.68	SW846 9056		12/26-12/27/06	6361402	
	Dilution Factor: 1									

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #....: G6L200192

Matrix.....: AIR

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	PREP
	RECOVERY	LIMITS	RPD		LIMITS	ANALYSIS DATE
Sulfate			WO#:JL60W1AC-LCS/JL60W1AD-LCSD	LCS	Lot-Sample#:	G6L270000-402
	98	(85 - 115)		SW846 9056	12/26-12/27/06	6361402
	98	(85 - 115)	0.68 (0-15)	SW846 9056	12/26-12/27/06	6361402
			Dilution Factor: 1			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

# AIR, PM-10 & TSP

Brown and Caldwell

Client Sample ID: P-0812

General Chemistry

Lot-Sample #....: G6L200192-001      Work Order #....: JLVQR      Matrix.....: AIR  
Date Sampled....: 12/05/06      Date Received...: 12/20/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Particulate Matter as PM10	0.0060	0.0001	g	CFR50J APDX J	12/21-12/22/06	7002322

Brown and Caldwell

Client Sample ID: P-0813

General Chemistry

Lot-Sample #....: G6L200192-002      Work Order #....: JLVQW      Matrix.....: AIR  
Date Sampled...: 12/05/06      Date Received...: 12/20/06

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Particulate Matter as PM10	0.0071	0.0001	g	CFR50J APDX J	12/21-12/22/06	7002322

Brown and Caldwell

Client Sample ID: P-0814

General Chemistry

Lot-Sample #....: G6L200192-003    Work Order #....: JLVQ1    Matrix.....: AIR  
Date Sampled....: 12/05/06    Date Received...: 12/20/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Particulate Matter as PM10	0.0187	0.0001	g	CFR50J APDX J	12/21-12/22/06	7002322

Brown and Caldwell

Client Sample ID: P-0815

General Chemistry

Lot-Sample #....: G6L200192-004      Work Order #....: JLVQ3      Matrix.....: AIR  
Date Sampled...: 12/05/06      Date Received...: 12/20/06

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Particulate Matter as PM10	0.0084	0.0001	g	CFR50J APDX J	12/21-12/22/06	7002322

Brown and Caldwell

Client Sample ID: 000580

General Chemistry

Lot-Sample #....: G6L200192-005      Work Order #....: JLVQ4      Matrix.....: AIR  
Date Sampled....: 12/05/06      Date Received...: 12/20/06

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Total Suspended Particulates	0.0462	0.0001	g	CFR50B APDX B	12/21-12/22/06	7002321

# AIR, 6020, Metals

## **Raw Data Package**

## **ICPMS**

SEVERN  
TRENT

STL

STL Sacramento  
ICP-MS Data Review Checklist  
Level I and Level II

Instrument ID (Circle one): <b>M01</b> <b>M02</b>		Method 6020 SOP SAC-MT-0001																										
File Number <b>061227C1</b>	Batch Numbers <b>6360054</b>	Date <b>12/27/06</b>	Analyst <b>BRJ</b>																									
Lot Numbers <b>G6L200192, G6L200196, G6L200199</b>			YES	NO																								
			NA																									
<table border="1"><tr><td>1. Copy of analysis protocol used included?</td><td>✓</td></tr><tr><td>2. ICVs &amp; CCVs within 10% of true value or recal and rerun?</td><td>✓</td></tr><tr><td>3. ICB &amp; CCBs &lt; reporting limit or recal and rerun?</td><td>✓</td></tr><tr><td>4. 10 samples or less analyzed between calibration checks?</td><td>✓</td></tr><tr><td>5. All parameters within linear range?</td><td>✓</td></tr><tr><td>6. LCS/LCSD within limits?</td><td>✓</td></tr><tr><td>7. Prep blank value &lt; reporting limit or all samples &gt;20x blank?</td><td>✓</td></tr><tr><td>8. Internal standard intensities for samples (unless followed by dilution) are &gt; 30% and &lt;130% of the Calibration Blank intensities?</td><td>✓</td></tr><tr><td>9. Appropriate dilution factors applied to data?</td><td>✓</td></tr><tr><td>10. Matrix spike and spike dup within customer defined limits?</td><td>✓</td></tr><tr><td>11. Each batch checked for presence of internal standard in samples?</td><td>✓</td></tr><tr><td>12. Anomalies entered using Clouseau?</td><td>✓</td></tr></table>					1. Copy of analysis protocol used included?	✓	2. ICVs & CCVs within 10% of true value or recal and rerun?	✓	3. ICB & CCBs < reporting limit or recal and rerun?	✓	4. 10 samples or less analyzed between calibration checks?	✓	5. All parameters within linear range?	✓	6. LCS/LCSD within limits?	✓	7. Prep blank value < reporting limit or all samples >20x blank?	✓	8. Internal standard intensities for samples (unless followed by dilution) are > 30% and <130% of the Calibration Blank intensities?	✓	9. Appropriate dilution factors applied to data?	✓	10. Matrix spike and spike dup within customer defined limits?	✓	11. Each batch checked for presence of internal standard in samples?	✓	12. Anomalies entered using Clouseau?	✓
1. Copy of analysis protocol used included?	✓																											
2. ICVs & CCVs within 10% of true value or recal and rerun?	✓																											
3. ICB & CCBs < reporting limit or recal and rerun?	✓																											
4. 10 samples or less analyzed between calibration checks?	✓																											
5. All parameters within linear range?	✓																											
6. LCS/LCSD within limits?	✓																											
7. Prep blank value < reporting limit or all samples >20x blank?	✓																											
8. Internal standard intensities for samples (unless followed by dilution) are > 30% and <130% of the Calibration Blank intensities?	✓																											
9. Appropriate dilution factors applied to data?	✓																											
10. Matrix spike and spike dup within customer defined limits?	✓																											
11. Each batch checked for presence of internal standard in samples?	✓																											
12. Anomalies entered using Clouseau?	✓																											

COMMENTS:

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REVIEWED BY: <b>MTZ</b>	DATA ENTERED BY: <b>BRJ</b>
DATE: <b>11/9/07</b>	DATE: <b>1/2/07</b>

# Dataset Report

Perkin Elmer ICPMS M01  
 SOP No. SAC-MT-0001  
 Method 6020

User Name: JonesB  
 Computer Name: SACP317A  
 Dataset File Path: C:\elandata\Dataset\061227C1\  
 Report Date/Time: Thursday, December 28, 2006 08:50:07

## The Dataset

Batch ID	Sample ID	Date and Time	Read Type	Description
6360054	JLVQR n.i.	17:43:10 Wed 27-Dec-06	Sample	G6L200192-1 N.I.
6360054	JLVRA n.i.	17:45:56 Wed 27-Dec-06	Sample	G6L200196-1 N.I.
6360054	JLVVG n.i.	17:48:42 Wed 27-Dec-06	Sample	G6L200199-1 N.I.
	Rinse 3X	17:52:58 Wed 27-Dec-06	Sample	
	Blank	17:56:44 Wed 27-Dec-06	Blank	
	Standard 1	18:00:23 Wed 27-Dec-06	Standard #1	
	ICV	18:03:47 Wed 27-Dec-06	Sample	
	ICB	18:07:16 Wed 27-Dec-06	Sample	
	LLSTD1	18:12:56 Wed 27-Dec-06	Sample	LL STD @ 10X
	LLSTD2	18:16:21 Wed 27-Dec-06	Sample	LL STD @ 5X ~out Cu (contam), Cr
	ICSA	18:20:48 Wed 27-Dec-06	Sample	
	ICSAB	18:24:15 Wed 27-Dec-06	Sample	
	Rinse	18:27:43 Wed 27-Dec-06	Sample	
	Rinse	18:31:14 Wed 27-Dec-06	Sample	
	CCV 1 >RECAL	18:34:44 Wed 27-Dec-06	Sample	out Al
	CCB 1	18:38:14 Wed 27-Dec-06	Sample	
	CCV 2	18:41:43 Wed 27-Dec-06	Sample	
	CCB 2	18:45:12 Wed 27-Dec-06	Sample	
6360054	JL4Q2B	18:48:42 Wed 27-Dec-06	Sample	G6L260000-54 BLK
6360054	JL4Q2C	18:52:10 Wed 27-Dec-06	Sample	G6L260000-54 LCS
6360054	JL4Q2L	18:55:34 Wed 27-Dec-06	Sample	G6L260000-54 LCSD
6360054	JLVQR	18:58:59 Wed 27-Dec-06	Sample	G6L200192-1
6360054	JLVQRP5	19:02:25 Wed 27-Dec-06	Sample	G6L200192-1.5X
6360054	JLVQRZ	19:05:50 Wed 27-Dec-06	Sample	G6L200192-1 PS
6360054	JLVQW	19:09:16 Wed 27-Dec-06	Sample	G6L200192-2
6360054	JLVQ1	19:12:43 Wed 27-Dec-06	Sample	G6L200192-3
6360054	JLVQ3	19:16:10 Wed 27-Dec-06	Sample	G6L200192-4
6360054	JLVQ4	19:19:37 Wed 27-Dec-06	Sample	G6L200192-5
	CCV 3 >RECAL	19:23:06 Wed 27-Dec-06	Sample	out Al
	CCB 3	19:26:35 Wed 27-Dec-06	Sample	
	CCV 4	19:30:05 Wed 27-Dec-06	Sample	
	CCB 4	19:33:34 Wed 27-Dec-06	Sample	
6360054	JLVRA	19:37:01 Wed 27-Dec-06	Sample	G6L200196-1
6360054	JLVRF	19:40:26 Wed 27-Dec-06	Sample	G6L200196-2
6360054	JLVRL	19:43:51 Wed 27-Dec-06	Sample	G6L200196-3
6360054	JLVRN	19:47:16 Wed 27-Dec-06	Sample	G6L200196-4
6360054	JLVRQ	19:50:42 Wed 27-Dec-06	Sample	G6L200196-5
6360054	JLVVG	19:54:08 Wed 27-Dec-06	Sample	G6L200199-1
6360054	JLVVJ	19:57:35 Wed 27-Dec-06	Sample	G6L200199-2
6360054	JLvvk	20:01:02 Wed 27-Dec-06	Sample	G6L200199-3
6360054	JLvvL	20:04:29 Wed 27-Dec-06	Sample	G6L200199-4
6360054	JLvvM	20:07:57 Wed 27-Dec-06	Sample	G6L200199-5
	CCV 5	20:11:25 Wed 27-Dec-06	Sample	
	CCB 5	20:14:55 Wed 27-Dec-06	Sample	
	CCV 6	20:18:24 Wed 27-Dec-06	Sample	
	CCB 6	20:21:54 Wed 27-Dec-06	Sample	
	LLSTD1	20:25:21 Wed 27-Dec-06	Sample	LL STD @ 10X ~out Cu
	LLSTD2	20:28:47 Wed 27-Dec-06	Sample	LL STD @ 5X ~out Cu
	ICSA	20:32:13 Wed 27-Dec-06	Sample	

ICSAB	20:35:40 Wed 27-Dec-06	Sample
Rinse	20:39:08 Wed 27-Dec-06	Sample
CCV 7	20:42:38 Wed 27-Dec-06	Sample -out A!
CCB 7	20:46:08 Wed 27-Dec-06	Sample

## STL Sacramento

## RUN SUMMARY

Method: 6020 (SOP: SAC-MT-001)

Instrument: M01

Reported: 01/02/07 12:55:37

File ID: 061227C1

Analyst: ionesb

#	Sample ID	Lot No.	Batch	DF	Analyzed Date	Comment	Q
1	JLVQR n.i.	G6L200192-1	6360054	2A	1.0 12/27/06 17:43		<input type="checkbox"/>
2	JLVRA n.i.	G6L200196-1	6360054	2A	1.0 12/27/06 17:45		<input type="checkbox"/>
3	JLVVG n.i.	G6L200199-1	6360054	2A	1.0 12/27/06 17:48		<input type="checkbox"/>
4	Rinse 3X				3.0 12/27/06 17:52		<input type="checkbox"/>
5	Blank				1.0 12/27/06 17:56		<input type="checkbox"/>
6	Standard1				1.0 12/27/06 18:00		<input type="checkbox"/>
7	ICV				1.0 12/27/06 18:03		<input type="checkbox"/>
8	ICB				1.0 12/27/06 18:07		<input type="checkbox"/>
9	LLSTD1				1.0 12/27/06 18:12		<input type="checkbox"/>
10	LLSTD2				1.0 12/27/06 18:16		<input type="checkbox"/>
11	ICSA				1.0 12/27/06 18:20		<input type="checkbox"/>
12	ICSAB				1.0 12/27/06 18:24		<input type="checkbox"/>
13	Rinse				1.0 12/27/06 18:27		<input type="checkbox"/>
14	Rinse				1.0 12/27/06 18:31		<input type="checkbox"/>
15	CCV 1				1.0 12/27/06 18:34		<input type="checkbox"/>
16	CCB 1				1.0 12/27/06 18:38		<input type="checkbox"/>
19	CCV 2				1.0 12/27/06 18:41		<input type="checkbox"/>
20	CCB 2				1.0 12/27/06 18:45		<input type="checkbox"/>
21	JL4Q2B	G6L260000	6360054	2A	1.0 12/27/06 18:48		<input type="checkbox"/>
22	JL4Q2C	G6L260000	6360054	2A	1.0 12/27/06 18:52		<input type="checkbox"/>
23	JL4Q2L	G6L260000	6360054	2A	1.0 12/27/06 18:55		<input type="checkbox"/>
24	JLVQR	G6L200192-1	6360054	2A	1.0 12/27/06 18:58		<input type="checkbox"/>
25	JLVQRP5	G6L200192	6360054		5.0 12/27/06 19:02		<input type="checkbox"/>
26	JLVQRZ	G6L200192-1	6360054		1.0 12/27/06 19:05		<input type="checkbox"/>
27	JLVQW	G6L200192-2	6360054	2A	1.0 12/27/06 19:09		<input type="checkbox"/>
28	JLVQ1	G6L200192-3	6360054	2A	1.0 12/27/06 19:12		<input type="checkbox"/>
29	JLVQ3	G6L200192-4	6360054	2A	1.0 12/27/06 19:16		<input type="checkbox"/>
30	JLVQ4	G6L200192-5	6360054	2A	1.0 12/27/06 19:19		<input type="checkbox"/>
31	CCV 3				1.0 12/27/06 19:23		<input type="checkbox"/>
32	CCB 3				1.0 12/27/06 19:26		<input type="checkbox"/>
35	CCV 4				1.0 12/27/06 19:30		<input type="checkbox"/>
36	CCB 4				1.0 12/27/06 19:33		<input type="checkbox"/>
37	JLVRA	G6L200196-1	6360054	2A	1.0 12/27/06 19:37		<input type="checkbox"/>
38	JLVRF	G6L200196-2	6360054	2A	1.0 12/27/06 19:40		<input type="checkbox"/>
39	JLVRL	G6L200196-3	6360054	2A	1.0 12/27/06 19:43		<input type="checkbox"/>
40	JLVRN	G6L200196-4	6360054	2A	1.0 12/27/06 19:47		<input type="checkbox"/>
41	JLVRQ	G6L200196-5	6360054	2A	1.0 12/27/06 19:50		<input type="checkbox"/>
42	JLVVG	G6L200199-1	6360054	2A	1.0 12/27/06 19:54		<input type="checkbox"/>
43	JLVVJ	G6L200199-2	6360054	2A	1.0 12/27/06 19:57		<input type="checkbox"/>
44	JLVVK	G6L200199-3	6360054	2A	1.0 12/27/06 20:01		<input type="checkbox"/>
45	JLVVL	G6L200199-4	6360054	2A	1.0 12/27/06 20:04		<input type="checkbox"/>
46	JLVM	G6L200199-5	6360054	2A	1.0 12/27/06 20:07		<input type="checkbox"/>
47	CCV 5				1.0 12/27/06 20:11		<input type="checkbox"/>
48	CCB 5				1.0 12/27/06 20:14		<input type="checkbox"/>
49	CCV 6				1.0 12/27/06 20:18		<input type="checkbox"/>
50	CCB 6				1.0 12/27/06 20:21		<input type="checkbox"/>

## STL Sacramento

## RUN SUMMARY

Method: 6020 (SOP: SAC-MT-001)

Instrument: M01

Reported: 01/02/07 12:55:37

File ID: 061227C1

Analyst: jonesb

#	Sample ID	Lot No.	Batch	DF	Analyzed Date	Comment	Q
51	<b>LLSTD1</b>			1.0	12/27/06 20:25		<input type="checkbox"/>
52	<b>LLSTD2</b>			1.0	12/27/06 20:28		<input type="checkbox"/>
53	<b>ICSA</b>			1.0	12/27/06 20:32		<input type="checkbox"/>
54	<b>ICSAB</b>			1.0	12/27/06 20:35		<input type="checkbox"/>
55	<b>Rinse</b>			1.0	12/27/06 20:39		<input type="checkbox"/>
56	<b>CCV 7</b>			1.0	12/27/06 20:42		<input type="checkbox"/>
57	<b>CCB 7</b>			1.0	12/27/06 20:46		<input type="checkbox"/>

## STL Sacramento

## INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001)

M01 (M01)

Reported: 01/02/07 12:55:37

File ID: 061227C1

Analyst: jonesb

#	Sample ID	Analyzed Date	Germanium	Indium	Q
1	JLVQR n.i.	12/27/06 17:43	0.1	0.1	<input type="checkbox"/>
2	JLVRA n.i.	12/27/06 17:45	0.1	0.1	<input type="checkbox"/>
3	JLVVG n.i.	12/27/06 17:48	0.1	0.1	<input type="checkbox"/>
4	Rinse 3X	12/27/06 17:52	100.0	100.5	<input type="checkbox"/>
5	Blank	12/27/06 17:56	100.0	100.0	<input checked="" type="checkbox"/>
6	Standard1	12/27/06 18:00	97.4	95.7	<input checked="" type="checkbox"/>
7	ICV	12/27/06 18:03	97.9	97.2	<input checked="" type="checkbox"/>
8	ICB	12/27/06 18:07	98.8	98.3	<input checked="" type="checkbox"/>
9	LLSTD1	12/27/06 18:12	97.8	97.7	<input checked="" type="checkbox"/>
10	LLSTD2	12/27/06 18:16	98.7	98.8	<input checked="" type="checkbox"/>
11	ICSA	12/27/06 18:20	82.2	81.3	<input checked="" type="checkbox"/>
12	ICSAB	12/27/06 18:24	81.2	82.9	<input checked="" type="checkbox"/>
13	Rinse	12/27/06 18:27	98.8	100.9	<input checked="" type="checkbox"/>
14	Rinse	12/27/06 18:31	99.0	100.1	<input checked="" type="checkbox"/>
15	CCV 1	12/27/06 18:34	97.2	96.5	<input checked="" type="checkbox"/>
16	CCB 1	12/27/06 18:38	98.8	98.3	<input checked="" type="checkbox"/>
19	CCV 2	12/27/06 18:41	98.3	98.5	<input checked="" type="checkbox"/>
20	CCB 2	12/27/06 18:45	98.9	98.9	<input checked="" type="checkbox"/>
21	JL4Q2B	12/27/06 18:48	100.6	102.2	<input checked="" type="checkbox"/>
22	JL4Q2C	12/27/06 18:52	97.4	100.0	<input checked="" type="checkbox"/>
23	JL4Q2L	12/27/06 18:55	96.5	98.8	<input checked="" type="checkbox"/>
24	JLVQR	12/27/06 18:58	98.6	100.8	<input checked="" type="checkbox"/>
25	JLVQRP5	12/27/06 19:02	99.3	98.4	<input type="checkbox"/>
26	JLVQRZ	12/27/06 19:05	97.6	99.6	<input checked="" type="checkbox"/>
27	JLVQW	12/27/06 19:09	99.0	100.2	<input checked="" type="checkbox"/>
28	JLVQ1	12/27/06 19:12	98.3	99.5	<input checked="" type="checkbox"/>
29	JLVQ3	12/27/06 19:16	99.8	101.3	<input checked="" type="checkbox"/>
30	JLVQ4	12/27/06 19:19	100.0	102.3	<input checked="" type="checkbox"/>
31	CCV 3	12/27/06 19:23	99.3	98.1	<input checked="" type="checkbox"/>
32	CCB 3	12/27/06 19:26	101.1	100.8	<input checked="" type="checkbox"/>
35	CCV 4	12/27/06 19:30	99.6	96.6	<input checked="" type="checkbox"/>
36	CCB 4	12/27/06 19:33	101.4	99.8	<input checked="" type="checkbox"/>
37	JLVRA	12/27/06 19:37	100.1	101.1	<input checked="" type="checkbox"/>
38	JLVRF	12/27/06 19:40	99.6	101.4	<input checked="" type="checkbox"/>
39	JLVRL	12/27/06 19:43	101.3	101.7	<input checked="" type="checkbox"/>
40	JLVRN	12/27/06 19:47	101.7	102.4	<input checked="" type="checkbox"/>
41	JLVRQ	12/27/06 19:50	100.5	101.0	<input checked="" type="checkbox"/>
42	JLVVG	12/27/06 19:54	100.2	99.5	<input checked="" type="checkbox"/>
43	JLVVJ	12/27/06 19:57	99.5	100.6	<input checked="" type="checkbox"/>
44	JLVVK	12/27/06 20:01	99.1	99.3	<input checked="" type="checkbox"/>
45	JLVVL	12/27/06 20:04	98.9	99.7	<input checked="" type="checkbox"/>
46	JLVVM	12/27/06 20:07	98.2	98.3	<input checked="" type="checkbox"/>
47	CCV 5	12/27/06 20:11	97.9	95.9	<input checked="" type="checkbox"/>
48	CCB 5	12/27/06 20:14	99.4	97.1	<input checked="" type="checkbox"/>
49	CCV 6	12/27/06 20:18	98.0	95.8	<input checked="" type="checkbox"/>
50	CCB 6	12/27/06 20:21	98.9	96.5	<input checked="" type="checkbox"/>

## STL Sacramento

## INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001)

M01 (M01)

Reported: 01/02/07 12:55:37

File ID: 061227C1

Analyst: jonesb

Germanium

Indium

Q

# Sample ID Analyzed Date

51	<b>LLSTD1</b>	<b>12/27/06 20:25</b>	<b>99.4</b>	<b>97.7</b>	<input checked="" type="checkbox"/>
52	<b>LLSTD2</b>	<b>12/27/06 20:28</b>	<b>98.9</b>	<b>97.2</b>	<input checked="" type="checkbox"/>
53	<b>ICSA</b>	<b>12/27/06 20:32</b>	<b>83.3</b>	<b>81.6</b>	<input checked="" type="checkbox"/>
54	<b>ICSAB</b>	<b>12/27/06 20:35</b>	<b>81.7</b>	<b>82.2</b>	<input checked="" type="checkbox"/>
55	<b>Rinse</b>	<b>12/27/06 20:39</b>	<b>97.3</b>	<b>98.2</b>	<input checked="" type="checkbox"/>
56	<b>CCV 7</b>	<b>12/27/06 20:42</b>	<b>96.0</b>	<b>95.7</b>	<input checked="" type="checkbox"/>
57	<b>CCB 7</b>	<b>12/27/06 20:46</b>	<b>98.5</b>	<b>96.4</b>	<input checked="" type="checkbox"/>

# STL SACRAMENTO - Elan 6000 ICPMS Perkin Elmer M01 Quantitative Method Report

File Name: 6360054.mth  
File Path: C:\elandata\Method\6360054.mth

## Timing Parameters

Sweeps/Reading: 50  
Readings/Replicate: 1  
Number of Replicates: 3  
Tuning File: default.tun  
Optimization File: default.dac  
QC Enabled: Yes  
Settling Time: Normal

Analyte	Mass	Scan Mode	MCA Channels	Dwell Time	Integration Time
Sc	44.956	Peak Hopping	1	14.0 ms	700 ms
Al	26.982	Peak Hopping	1	14.0 ms	700 ms
Ca	43.956	Peak Hopping	1	14.0 ms	700 ms
Cr	51.941	Peak Hopping	1	14.0 ms	700 ms
Mn	54.938	Peak Hopping	1	14.0 ms	700 ms
Co	58.933	Peak Hopping	1	14.0 ms	700 ms
Ni	59.933	Peak Hopping	1	14.0 ms	700 ms
Cu	64.928	Peak Hopping	1	14.0 ms	700 ms
As	74.922	Peak Hopping	1	20.0 ms	1000 ms
Ge-1	71.922	Peak Hopping	1	14.0 ms	700 ms
Cd	110.904	Peak Hopping	1	14.0 ms	700 ms
In-1	114.904	Peak Hopping	1	14.0 ms	700 ms
Cr	49.946	Peak Hopping	1	5.0 ms	250 ms
Cr	52.941	Peak Hopping	1	5.0 ms	250 ms
Ni	60.931	Peak Hopping	1	5.0 ms	250 ms
Cu	62.930	Peak Hopping	1	5.0 ms	250 ms
Ge	71.922	Peak Hopping	1	14.0 ms	700 ms
Cd	107.904	Peak Hopping	1	5.0 ms	250 ms
Cd	113.904	Peak Hopping	1	14.0 ms	700 ms
In	114.904	Peak Hopping	1	14.0 ms	700 ms
Pd	105.903	Peak Hopping	1	14.0 ms	700 ms
Kr	82.914	Peak Hopping	1	14.0 ms	700 ms

## Signal Processing

Detector Mode: Dual  
Measurement Units: Counts  
AutoLens: On  
Spectral Peak Processing: Average  
Signal Profile Processing: Average  
Blank Subtraction: After Internal Standard  
Baseline Readings: 0  
Smoothing: Yes, Factor 5

## Equations

Analyte	Mass	Corrections
Ni	59.933	-0.005 * Ca 43
Cu	64.928	-0.0078 * Ti 49
As	74.922	-3.1278 * Se 77 + 1.0177 * Se 78

Cd	110.904	-1.073 * Pd 108 + 0.712 * Pd 106
In-1	114.904	- 0.014032 * Sn 118
Cr	49.946	- 0.739726 * Ti 47 - 0.002506 * V 51
Cd	107.904	- 1.184953 * Pd 105
Cd	113.904	- 0.026826 * Sn 118
In	114.904	- 0.014032 * Sn 118

#### Calibration Information

Analyte	Mass	Curve Type	Sample Units	Std Units	Std 1	Std 2	Std 3	Std 4
Sc	44.956	Linear Thru Zero	ug/L	ug/L				
Al	26.982	Linear Thru Zero	ug/L	ug/L	5.1e+003			
Ca	43.956	Linear Thru Zero	ug/L	ug/L	5.1e+003			
Cr	51.941	Linear Thru Zero	ug/L	ug/L	100			
Mn	54.938	Linear Thru Zero	ug/L	ug/L	100			
Co	58.933	Linear Thru Zero	ug/L	ug/L	100			
Ni	59.933	Linear Thru Zero	ug/L	ug/L	100			
Cu	64.928	Linear Thru Zero	ug/L	ug/L	100			
As	74.922	Linear Thru Zero	ug/L	ug/L	100			
Ge-1	71.922	Linear Thru Zero	ug/L	ug/L				
Cd	110.904	Linear Thru Zero	ug/L	ug/L	100			
In-1	114.904	Linear Thru Zero	ug/L	ug/L				
Cr	49.946	Linear Thru Zero	ug/L	ug/L	100			
Cr	52.941	Linear Thru Zero	ug/L	ug/L	100			
Ni	60.931	Linear Thru Zero	ug/L	ug/L	100			
Cu	62.930	Linear Thru Zero	ug/L	ug/L	100			
Ge	71.922	Linear Thru Zero	ug/L	ug/L				
Cd	107.904	Linear Thru Zero	ug/L	ug/L	100			
Cd	113.904	Linear Thru Zero	ug/L	ug/L	100			
In	114.904	Linear Thru Zero	ug/L	ug/L				
Pd	105.903	Linear Thru Zero	ug/L	ug/L	100			
Kr	82.914	Linear Thru Zero	ug/L	ug/L	100			

**STL SACRAMENTO - Perkin Elmer Elan 6000 ICPMS, M01 – Methods 6020, 200.8**

**AIR TOX STANDARDS - 4 % HNO<sub>3</sub>, 0.5 % HCl**

**Standards for run:**

Tuning standard: 2830-29D

Internal standard: 2830-30B

Blank, CCBs: 2531-37E

Standard 1, CCVs: 2830-29C

ICV: 2830-18D

ICSA: 2830-30A

ICSAB: 2830-28E

File Number: 061227C1

## Instrument Tuning Report - Elan 6000

File Name: default.tun

### Sample Information

Sample Date/Time: Wednesday, December 27, 2006 12:04:45

Sample ID: TUNE BJONES

Analyte	Exact Mass	Meas. Mass	Mass DAC	Meas. Pk. Width	Res. DAC	Custom Res.
Li	7.016	7.027	1579	0.723	2019	
Be	9.012	9.079	2073	0.721	2007	
Co	58.933	58.978	14298	0.725	1883	
In	114.904	114.878	27959	0.730	1844	
Ce	139.905	139.879	34042	0.720	1891	
Tl	204.975	204.979	49746	0.709	2114	
Pb	207.977	207.978	50476	0.695	2132	
U	238.050	238.025	57681	0.699	2296	

## Elan 6000 Instrument Optomization Report

File Name c:\elandata\Optimize\default.dac

Path c:\elandata\Optimize

### Sample Information

Sample Date/Time: Wednesday, December 27, 2006 12:04:45

Sample ID: TUNE BJONES

### Parameter Settings

Nebulizer Gas Flow	0.9
Lens Voltage	6.5
ICP RF Power	1100.0
Analog Stage Voltage	-2100.0
Pulse Stage Voltage	1450.0
Discriminator Threshold	70.0
AC Rod Offset	-7.0
Service DAC 1	60.0
Quadrupole Rod Offset	0.0

### AutoLens Calibration

Date: 12:11:47 Wed 27-Dec-06

Sample Filename: AUTOLENS BJONES.002

Dataset Pathname: 061227A1\

Lens Voltage Start: 3.50 V  
Lens Voltage End: 8.50 V  
Lens Voltage Step: 0.25 V  
Slope: 0.0308  
Intercept: 3.8732

Analyte	Mass	Optimum Voltage	Maximum Intensity	# Points
Be	9.012	4.3 V	6161 cps	21
Co	58.933	5.5 V	169815 cps	21
In	114.904	7.5 V	332379 cps	21

### Dual Detector Calibration

Date: 15:27:19 Tue 26-Dec-06

Sample Filename: DUAL BJONES.790

Dataset Pathname: c:\elandata\Dataset\dual detector calibration\

Points Acquired: 37  
Lens Voltage Start: -3.00 V  
Lens Voltage End: 15.00 V  
Lens Voltage Step: 0.50 V

Analyte	Mass	Gain	N(max)
Li	6.016	7668	1.63e+009 cps
Li	7.014	7031	1.78e+009 cps
Be	9.014	6641	1.89e+009 cps
B	11.008	6908	1.81e+009 cps
Na	22.989	6977	1.79e+009 cps

Report Date/Time: Wednesday, December 27, 2006 17:31:45

STL SACRAMENTO - Elan 6000 ICPMS, M01 - Methods 6020, 200.8

Mg	23.984	6554 1.91e+009 cps
Mg	24.987	6268 2.00e+009 cps
Al	26.980	6050 2.07e+009 cps
P	30.996	5500 2.28e+009 cps
K	38.965	5320 2.35e+009 cps
Ca	42.960	cps
Ca	43.955	5331 2.35e+009 cps
Sc	44.958	5317 2.35e+009 cps
V	50.942	5183 2.42e+009 cps
Cr	51.941	5026 2.49e+009 cps
Fe	53.938	4925 2.54e+009 cps
Mn	54.937	4884 2.56e+009 cps
Fe	56.935	4704 2.66e+009 cps
Co	58.934	4679 2.68e+009 cps
Ni	59.933	4577 2.74e+009 cps
Cu	62.931	4443 2.82e+009 cps
Cu	64.929	4415 2.84e+009 cps
Zn	67.926	4449 2.81e+009 cps
Ge	71.923	4537 2.76e+009 cps
As	74.920	4391 2.85e+009 cps
Se	77.917	4584 2.73e+009 cps
Br	78.916	cps
Se	81.918	4418 2.83e+009 cps
Sr	87.905	4471 2.80e+009 cps
Mo	96.905	4519 2.77e+009 cps
Ag	106.904	4067 3.08e+009 cps
Ag	108.907	4089 3.06e+009 cps
Cd	110.905	4109 3.05e+009 cps
Cd	113.902	4163 3.01e+009 cps
In	114.903	4196 2.98e+009 cps
Sn	117.903	4237 2.95e+009 cps
Sb	120.903	4117 3.04e+009 cps
Ba	134.905	4043 3.10e+009 cps
Tm	168.936	4015 3.12e+009 cps
Tl	204.976	3743 3.34e+009 cps
Pb	207.978	3760 3.33e+009 cps
Bi	208.981	cps
U	238.051	3764 3.33e+009 cps

## Daily Performance Report - Elan 6000

Sample ID: DAILY BJONES

Sample Date/Time: Wednesday, December 27, 2006 12:14:23

Sample Description:

Sample File: C:\elandata\Sample\MDLCHECK.sam

Method File: C:\elandata\Method\000-DAILY\_EPA.mth

Dataset File: c:\elandata\dataset\061227a1\DAILY BJONES.003

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Number of Replicates: 5

Dual Detector Mode: Dual

### Summary

Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
Mg	24	29414.581	637.644	2.168
Rh	103	213317.750	1912.966	0.897
Pb	208	155928.556	1069.533	0.686
[> Ba	138	252293.336	4464.724	1.770
Ba++	69	0.019	0.001	3.264
[> Ce	140	307883.723	2246.599	0.730
CeO	156	0.031	0.001	2.654
Bkgd	220	0.571	0.782	136.931
Li	7	2961.208	75.127	2.537
Be	9	1485.803	53.344	3.590
Co	59	120023.391	2552.615	2.127
In	115	295153.889	2575.785	0.873
Tl	205	217300.593	3458.535	1.592

Sample ID: JLVQR n.i.

Sample Description: G6L200192-1 N.I.

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 17:43:10

Method File: C:\elandata\Method\000-LISCGEIN...mth

Dataset File: C:\elandata\Dataset\061227C1\JLVQR n.i..001

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 27

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

## Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
6 Li			107.620	ug/L	0.000
45 Sc			5324.944	ug/L	0.000
69 Ga			3162.781	ug/L	0.000
72 Ge			1483.898	ug/L	0.000
89 Y			2830.320	ug/L	0.000
103 Rh			50.476	ug/L	0.000
115 In			971.558	ug/L	0.000
133 Cs			1985.396	ug/L	0.000
165 Ho			124.763	ug/L	0.000
169 Tm			916.700	ug/L	0.000
209 Bi			812.407	ug/L	0.000

## Internal Standard Recoveries

Analyte	Mass	Int Std	% Recovery
Li	6		101.959
Sc	45		
Ga	69		
Ge	72		
Y	89		
Rh	103		
In	115		
Cs	133		
Ho	165		
Tm	169		
Bi	209		

Sample ID: JLVRA n.i.

Sample Description: G6L200196-1 N.I.

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 17:45:56

Method File: C:\elandata\Method\000-LISCGEIN....mth

Dataset File: C:\elandata\Dataset\061227C1\JLVRA n.i..002

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 28

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
6 Li			116.667	ug/L	0.000
45 Sc			4820.453	ug/L	0.000
69 Ga			2847.467	ug/L	0.000
72 Ge			1403.412	ug/L	0.000
89 Y			2444.525	ug/L	0.000
103 Rh			40.000	ug/L	0.000
115 In			903.761	ug/L	0.000
133 Cs			1846.327	ug/L	0.000
165 Ho			125.239	ug/L	0.000
169 Tm			889.555	ug/L	0.000
209 Bi			1162.435	ug/L	0.000

### Internal Standard Recoveries

Analyte Mass	Int Std % Recovery
Li 6	101.959
Sc 45	
Ga 69	
Ge 72	
Y 89	
Rh 103	
In 115	
Cs 133	
Ho 165	
Tm 169	
Bi 209	

Sample ID: JLVVG n.i.

Sample Description: G6L200199-1 N.I.

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 17:48:42

Method File: C:\elandata\Method\000-LISCGEIN...mth

Dataset File: C:\elandata\Dataset\061227C1\JLVVG n.i..003

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 29

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

## Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
6 Li			105.239	ug/L	0.000
45 Sc			5441.186	ug/L	0.000
69 Ga			4217.378	ug/L	0.000
72 Ge			1521.521	ug/L	0.000
89 Y			3748.181	ug/L	0.000
103 Rh			55.714	ug/L	0.000
115 In			922.230	ug/L	0.000
133 Cs			2847.944	ug/L	0.000
165 Ho			183.811	ug/L	0.000
169 Tm			836.695	ug/L	0.000
209 Bi			2183.048	ug/L	0.000

## Internal Standard Recoveries

Analyte Mass	Int Std % Recovery
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Li 6	101.959
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Sc 45	
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Ga 69	
-------	--

Ge 72	
-------	--

Y 89	
------	--

Rh 103	
--------	--

In 115	
--------	--

Cs 133	
--------	--

Ho 165	
--------	--

Tm 169	
--------	--

Bi 209	
--------	--

BJones

**Sample ID: Rinse 3X**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 17:52:58

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\Rinse 3X.004

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 6

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1515610.438	ug/L	0.000
27 Al			22184.087	ug/L	0.000
44 Ca			13585.872	ug/L	0.000
52 Cr			36459.483	ug/L	0.000
55 Mn			1155.743	ug/L	0.000
59 Co			53.667	ug/L	0.000
60 Ni			33.488	ug/L	0.000
65 Cu			73.453	ug/L	0.000
75 As			18019.571	ug/L	0.000
72 Ge-1			1120233.615	ug/L	0.000
111 Cd			65.279	ug/L	0.000
115 In-1			1031539.192	ug/L	0.000
50 Cr			-198.279	ug/L	0.000
53 Cr			41595.428	ug/L	0.000
61 Ni			1985.631	ug/L	0.000
63 Cu			57.001	ug/L	0.000
72 Ge			1120233.615	ug/L	0.000
108 Cd			9.630	ug/L	0.000
114 Cd			174.487	ug/L	0.000
115 In			1031539.192	ug/L	0.000
106 Pd			15.667	ug/L	0.000
83 Kr			405.343	ug/L	0.000

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45
Al	27
Ca	44
Cr	52
Mn	55
Co	59
Ni	60
Cu	65
As	75
Ge-1	72
Cd	111
In-1	115

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72
	Cd	108
	Cd	114
>	In	115
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: Blank**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 17:56:44

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\Blank.005

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1499711.762		ug/L	
27 Al					22630.227		ug/L	
44 Ca					13916.058		ug/L	
52 Cr					37802.824		ug/L	
55 Mn					1286.095		ug/L	
59 Co					58.000		ug/L	
60 Ni					42.670		ug/L	
65 Cu					89.432		ug/L	
75 As					18209.848		ug/L	
72 Ge-1					1120768.790		ug/L	
111 Cd					69.938		ug/L	
115 In-1					1026270.412		ug/L	
50 Cr					-91.740		ug/L	
53 Cr					42231.502		ug/L	
61 Ni					1897.910		ug/L	
63 Cu					63.334		ug/L	
72 Ge					1120768.790		ug/L	
108 Cd					6.630		ug/L	
114 Cd					161.553		ug/L	
115 In					1026270.412		ug/L	
106 Pd					10.667		ug/L	
83 Kr					403.343		ug/L	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45
Al	27
Ca	44
Cr	52
Mn	55
Co	59
Ni	60
Cu	65
As	75
Ge-1	72
Cd	111
In-1	115

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72
	Cd	108
	Cd	114
>	In	115
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: Standard 1**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:00:23

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\Standard 1.006

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1455995.001	ug/L	1499711.762
27 Al	5100.000000	0.956	24641923.448	ug/L	22630.227
44 Ca	5100.000000	0.664	1541101.510	ug/L	13916.058
52 Cr	100.000000	1.398	1060620.711	ug/L	37802.824
55 Mn	100.000000	1.338	1509839.079	ug/L	1286.095
59 Co	100.000000	0.334	1144712.425	ug/L	58.000
60 Ni	100.000000	0.955	242757.464	ug/L	42.670
65 Cu	100.000000	0.428	240016.691	ug/L	89.432
75 As	100.000000	0.413	229960.016	ug/L	18209.848
72 Ge-1			1092173.781	ug/L	1120768.790
111 Cd	100.000000	0.727	182225.585	ug/L	69.938
115 In-1			982026.817	ug/L	1026270.412
50 Cr	100.000000	2.268	22997.229	ug/L	-91.740
53 Cr	100.000000	7.555	80514.982	ug/L	42231.502
61 Ni	100.000000	5.386	5872.187	ug/L	1897.910
63 Cu	100.000000	0.998	178393.419	ug/L	63.334
72 Ge			1092173.781	ug/L	1120768.790
108 Cd	100.000000	0.995	12859.559	ug/L	6.630
114 Cd	100.000000	0.291	426738.973	ug/L	161.553
115 In			982026.817	ug/L	1026270.412
106 Pd	100.000000	0.394	16962.760	ug/L	10.667
83 Kr	100.000000	83.550	416.010	ug/L	403.343

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45
Al	27
Ca	44
Cr	52
Mn	55
Co	59
Ni	60
Cu	65
As	75
Ge-1	72
Cd	111
In-1	115

Cr	50
Cr	53
Ni	61
Cu	63
> Ge	72
Cd	108
Cd	114
> In	115
Pd	106
Kr	83

BJones

**Sample ID: ICV**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:03:47

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\ICV .007

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 3

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1455246.972	ug/L	1499711.762
27 Al	818.604636	1.749	3990907.698	ug/L	22630.227
44 Ca	902.969222	1.439	285239.867	ug/L	13916.058
52 Cr	80.045661	1.107	860140.781	ug/L	37802.824
55 Mn	83.455765	0.932	1265676.332	ug/L	1286.095
59 Co	79.802160	0.417	917489.635	ug/L	58.000
60 Ni	80.640907	0.346	196610.213	ug/L	42.670
65 Cu	80.951245	1.594	195155.901	ug/L	89.432
75 As	78.647012	0.369	185452.546	ug/L	18209.848
72 Ge-1			1096947.304	ug/L	1120768.790
111 Cd	79.507521	0.644	147116.816	ug/L	69.938
115 In-1			997096.332	ug/L	1026270.412
50 Cr	73.712744	0.499	17003.661	ug/L	-91.740
53 Cr	75.082690	3.510	71003.522	ug/L	42231.502
61 Ni	79.659130	6.296	5075.123	ug/L	1897.910
63 Cu	80.570345	0.454	144364.662	ug/L	63.334
72 Ge			1096947.304	ug/L	1120768.790
108 Cd	78.372238	1.125	10233.509	ug/L	6.630
114 Cd	79.535708	1.340	344621.229	ug/L	161.553
115 In			997096.332	ug/L	1026270.412
106 Pd	79.947876	0.862	13563.505	ug/L	10.667
83 Kr	478.949784	98.778	464.012	ug/L	403.343

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	97.875
Cd	111	
In-1	115	97.157

Cr	50	
Cr	53	
Ni	61	
Cu	63	
> Ge	72	97.875
Cd	108	
Cd	114	
> In	115	97.157
Pd	106	
Kr	83	

**Sample ID: ICB**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:07:16

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\ICB.008

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1455191.790	ug/L	1499711.762
27 Al	-0.168522	74.409	21518.765	ug/L	22630.227
44 Ca	0.705244	40.379	13956.790	ug/L	13916.058
52 Cr	0.091678	79.939	38277.208	ug/L	37802.824
55 Mn	-0.002985	71.091	1224.752	ug/L	1286.095
59 Co	0.001419	46.480	73.667	ug/L	58.000
60 Ni	0.000676	585.465	43.827	ug/L	42.670
65 Cu	-0.004935	110.699	76.449	ug/L	89.432
75 As	-0.335426	97.962	17259.734	ug/L	18209.848
72 Ge-1			1106845.678	ug/L	1120768.790
111 Cd	0.000276	1302.669	69.271	ug/L	69.938
115 In-1			1009312.636	ug/L	1026270.412
50 Cr	-0.270016	12.441	-153.769	ug/L	-91.740
53 Cr	-15.479916	8.736	35534.942	ug/L	42231.502
61 Ni	-1.427656	122.818	1816.529	ug/L	1897.910
63 Cu	0.002081	136.302	66.334	ug/L	63.334
72 Ge			1106845.678	ug/L	1120768.790
108 Cd	-0.005294	297.567	5.840	ug/L	6.630
114 Cd	0.004363	133.084	177.733	ug/L	161.553
115 In			1009312.636	ug/L	1026270.412
106 Pd	0.0002652200472.951		10.667	ug/L	10.667
83 Kr	2602.679146	5.263	733.031	ug/L	403.343

**Internal Standard Recoveries**

Analyte Mass	Int Std % Recovery
Sc 45	
Al 27	
Ca 44	
Cr 52	
Mn 55	
Co 59	
Ni 60	
Cu 65	
As 75	
Ge-1 72	98.758
Cd 111	
In-1 115	98.348

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72 98.758
	Cd	108
	Cd	114
>	In	115 98.348
	Pd	106
	Kr	83

**Sample ID: LLSTD1**

Sample Description: LL STD @ 10X

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:12:56

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\LLSTD1.009

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 83

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1454517.338	ug/L	1499711.762
27 Al	58.976309	1.882	307713.281	ug/L	22630.227
44 Ca	57.175037	1.475	30782.720	ug/L	13916.058
52 Cr	0.780179	5.052	44974.994	ug/L	37802.824
55 Mn	1.093911	2.852	17807.437	ug/L	1286.095
59 Co	1.012313	0.973	11680.792	ug/L	58.000
60 Ni	1.022257	3.527	2530.341	ug/L	42.670
65 Cu	1.407105	0.686	3474.241	ug/L	89.432
75 As	0.714700	68.453	19317.138	ug/L	18209.848
72 Ge-1			1095713.875	ug/L	1120768.790
111 Cd	0.980368	2.075	1892.174	ug/L	69.938
115 In-1			1002927.453	ug/L	1026270.412
50 Cr	1.729039	18.768	311.029	ug/L	-91.740
53 Cr	-18.173578	2.535	34116.932	ug/L	42231.502
61 Ni	-2.866923	14.167	1739.818	ug/L	1897.910
63 Cu	1.461312	1.569	2675.812	ug/L	63.334
72 Ge			1095713.875	ug/L	1120768.790
108 Cd	0.950601	4.003	131.236	ug/L	6.630
114 Cd	0.978228	0.755	4419.696	ug/L	161.553
115 In			1002927.453	ug/L	1026270.412
106 Pd	0.959577	10.795	173.335	ug/L	10.667
83 Kr	386.842974	28.303	452.345	ug/L	403.343

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	97.764
Cd	111	
In-1	115	97.725

Cr	50	
Cr	53	
Ni	61	
Cu	63	
> Ge	72	97.764
Cd	108	
Cd	114	
> In	115	97.725
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: LLSTD2**

Sample Description: LL STD @ 5X

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:16:21

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\LLSTD2.010

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 84

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1433836.183	ug/L	1499711.762
27 Al	113.824614	1.327	579072.574	ug/L	22630.227
44 Ca	111.614246	1.005	47611.187	ug/L	13916.058
>52 Cr	1.476960	2.738	52646.919	ug/L	37802.824
55 Mn	2.157091	0.773	34238.529	ug/L	1286.095
59 Co	2.022607	2.046	23512.217	ug/L	58.000
60 Ni	1.972020	4.076	4890.426	ug/L	42.670
65 Cu X	13.727280	0.986	33457.029	ug/L	89.432
75 As	1.797548	9.254	21844.272	ug/L	18209.848
72 Ge-1			1106624.351	ug/L	1120768.790
111 Cd	1.921678	2.414	3682.364	ug/L	69.938
115 In-1			1013662.095	ug/L	1026270.412
50 Cr	3.119299	3.936	639.274	ug/L	-91.740
53 Cr	-25.144333	3.933	31678.122	ug/L	42231.502
61 Ni	-0.636213	120.573	1848.213	ug/L	1897.910
63 Cu	14.063501	0.937	25473.424	ug/L	63.334
72 Ge			1106624.351	ug/L	1120768.790
108 Cd	1.983289	9.583	269.598	ug/L	6.630
114 Cd	1.915224	2.210	8592.324	ug/L	161.553
115 In			1013662.095	ug/L	1026270.412
106 Pd	1.966365	1.200	344.007	ug/L	10.667
83 Kr	110.526458	167.870	417.343	ug/L	403.343

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.738
Cd	111	
In-1	115	98.771

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            98.738
	Cd	108
	Cd	114
>	In	115            98.771
	Pd	106
	Kr	83

BJones

**Sample ID: ICSA**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:20:48

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\ICSA.011

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 2

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1144484.426	ug/L	1499711.762
27 Al	80264.419235	3.769	326796756.072	ug/L	22630.227
44 Ca	83594.393378	2.188	21123813.228	ug/L	13916.058
52 Cr	1.087152	8.615	40442.256	ug/L	37802.824
55 Mn	5.228473	0.293	67555.797	ug/L	1286.095
59 Co	2.497907	1.555	24154.296	ug/L	58.000
60 Ni	3.446733	4.268	7086.767	ug/L	42.670
65 Cu	0.200228	57.759	478.030	ug/L	89.432
75 As	0.409318	137.079	15691.324	ug/L	18209.848
72 Ge-1			920892.695	ug/L	1120768.790
111 Cd	0.366646	18.700	624.013	ug/L	69.938
115 In-1			834173.286	ug/L	1026270.412
50 Cr	269.500999	1.919	52391.455	ug/L	-91.740
53 Cr	-3.915813	42.246	33403.644	ug/L	42231.502
61 Ni	32.241078	5.867	2652.459	ug/L	1897.910
63 Cu	5.579458	2.680	8441.058	ug/L	63.334
72 Ge			920892.695	ug/L	1120768.790
108 Cd	68.481062	1.567	7482.082	ug/L	6.630
114 Cd	3.886994	1.008	14216.220	ug/L	161.553
115 In			834173.286	ug/L	1026270.412
106 Pd	0.617431	5.516	115.334	ug/L	10.667
83 Kr	2492.149059	10.502	719.030	ug/L	403.343

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	82.166
Cd	111	
In-1	115	81.282

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            82.166
	Cd	108
	Cd	114
>	In	115            81.282
	Pd	106
	Kr	83

BJones

**Sample ID: ICSAB**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:24:15

Method File: C:\elalandata\Method\6360054.mth

Dataset File: C:\elalandata\Dataset\061227C1\ICSAB.012

Tuning File: c:\elalandata\Tuning\default.tun

Optimization File: c:\elalandata\Optimize\default.dac

Autosampler Position: 1

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1068218.607	ug/L	1499711.762	
27 Al	70971.375434	1.213			285459813.946	ug/L	22630.227	
44 Ca	77995.381615	0.699			19472373.576	ug/L	13916.058	
52 Cr	97.547042	0.148			862683.863	ug/L	37802.824	
55 Mn	106.681234	0.309			1341595.034	ug/L	1286.095	
59 Co	101.178673	0.234			964829.774	ug/L	58.000	
60 Ni	97.617723	0.429			197397.974	ug/L	42.670	
65 Cu	89.741223	0.519			179435.170	ug/L	89.432	
75 As	105.766952	0.159			201769.596	ug/L	18209.848	
72 Ge-1					909851.283	ug/L	1120768.790	
111 Cd	98.114666	0.182			154901.771	ug/L	69.938	
115 In-1					850821.630	ug/L	1026270.412	
50 Cr	352.452401	3.465			67703.924	ug/L	-91.740	
53 Cr	80.128665	2.978			60545.714	ug/L	42231.502	
61 Ni	119.930205	0.843			5558.272	ug/L	1897.910	
63 Cu	96.325736	0.661			143142.793	ug/L	63.334	
72 Ge					909851.283	ug/L	1120768.790	
108 Cd	166.062268	0.582			18497.927	ug/L	6.630	
114 Cd	100.910244	0.228			373083.326	ug/L	161.553	
115 In					850821.630	ug/L	1026270.412	
106 Pd	85.834684	1.761			14561.442	ug/L	10.667	
83 Kr	2276.352044	6.710			691.694	ug/L	403.343	

**Internal Standard Recoveries**

Analyte	Mass	Int Std	% Recovery
Sc	45		
Al	27		
Ca	44		
Cr	52		
Mn	55		
Co	59		
Ni	60		
Cu	65		
As	75		
Ge-1	72		81.181
Cd	111		
In-1	115		82.904

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            81.181
	Cd	108
	Cd	114
>	In	115            82.904
	Pd	106
	Kr	83

BJones

**Sample ID: Rinse**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:27:43

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\Rinse.013

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 6

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc. RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc				1335204.803	ug/L	1499711.762	
27 Al	-0.210662	20.719		21315.599	ug/L	22630.227	
44 Ca	-5.436372	26.368		12090.687	ug/L	13916.058	
52 Cr	-0.797958	6.817		29046.800	ug/L	37802.824	
55 Mn	-0.008089	58.769		1147.075	ug/L	1286.095	
59 Co	0.000347	190.945		61.334	ug/L	58.000	
60 Ni	-0.000763	682.193		40.357	ug/L	42.670	
65 Cu	0.005030	50.240		100.588	ug/L	89.432	
75 As	0.248739	24.785		18518.643	ug/L	18209.848	
72 Ge-1				1106794.377	ug/L	1120768.790	
111 Cd	-0.006917	120.818		57.404	ug/L	69.938	
115 In-1				1035022.376	ug/L	1026270.412	
50 Cr	-0.203977	78.544		-138.000	ug/L	-91.740	
53 Cr	-16.674370	2.171		35056.894	ug/L	42231.502	
61 Ni	1.841034	144.317		1949.276	ug/L	1897.910	
63 Cu	0.008114	103.796		77.334	ug/L	63.334	
72 Ge				1106794.377	ug/L	1120768.790	
108 Cd	0.209875	8.811		35.087	ug/L	6.630	
114 Cd	0.007528	34.758		196.900	ug/L	161.553	
115 In				1035022.376	ug/L	1026270.412	
106 Pd	-0.023596	101.036		6.667	ug/L	10.667	
83 Kr	273.684565	22.896		438.011	ug/L	403.343	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.753
Cd	111	
In-1	115	100.853

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            98.753
	Cd	108
	Cd	114
>	In	115            100.853
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: Rinse**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:31:14

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\Rinse.014

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 6

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1356278.461	ug/L	1499711.762	
27 Al	0.024737	606.828			22519.288	ug/L	22630.227	
44 Ca	-5.731448	10.246			12031.601	ug/L	13916.058	
52 Cr	-0.766455	3.812			29448.475	ug/L	37802.824	
55 Mn	-0.010622	9.048			1110.404	ug/L	1286.095	
59 Co	0.000276	220.915			60.667	ug/L	58.000	
60 Ni	-0.001141	185.645			39.412	ug/L	42.670	
65 Cu	-0.003417	83.845			80.251	ug/L	89.432	
75 As	0.159737	184.345			18374.819	ug/L	18209.848	
72 Ge-1					1109447.994	ug/L	1120768.790	
111 Cd	-0.008241	75.023			54.216	ug/L	69.938	
115 In-1					1027073.452	ug/L	1026270.412	
50 Cr	-0.211868	28.405			-140.460	ug/L	-91.740	
53 Cr	-15.626622	11.647			35562.634	ug/L	42231.502	
61 Ni	3.808857	29.410			2033.995	ug/L	1897.910	
63 Cu	-0.001989	350.815			59.001	ug/L	63.334	
72 Ge					1109447.994	ug/L	1120768.790	
108 Cd	0.045674	77.649			12.778	ug/L	6.630	
114 Cd	0.000176	2821.641			162.591	ug/L	161.553	
115 In					1027073.452	ug/L	1026270.412	
106 Pd	-0.009832	374.700			9.000	ug/L	10.667	
83 Kr	13.158017	1456.146			405.009	ug/L	403.343	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.990
Cd	111	
In-1	115	100.078

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            98.990
	Cd	108
	Cd	114
>	In	115            100.078
	Pd	106
	Kr	83

BJones

**Sample ID: CCV 1**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:34:44

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCV 1.015

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1373929.578	ug/L	1499711.762	
27 Al	X	4258.713084	0.487		20533786.530	ug/L	22630.227	
44 Ca		4593.854539	0.264		1386213.494	ug/L	13916.058	
52 Cr		96.772424	0.796		1025257.069	ug/L	37802.824	
55 Mn		96.880051	1.412		1459277.715	ug/L	1286.095	
59 Co		96.713417	0.923		1104489.076	ug/L	58.000	
60 Ni		96.264528	0.513		233132.149	ug/L	42.670	
65 Cu		97.458288	1.800		233380.641	ug/L	89.432	
75 As		100.426726	0.934		230323.019	ug/L	18209.848	
72 Ge-1					1089626.147	ug/L	1120768.790	
111 Cd		99.932040	1.311		183603.297	ug/L	69.938	
115 In-1					990231.595	ug/L	1026270.412	
50 Cr		95.955549	8.039		22017.532	ug/L	-91.740	
53 Cr		89.539045	4.112		76202.591	ug/L	42231.502	
61 Ni		93.367460	2.250		5590.998	ug/L	1897.910	
63 Cu		97.684686	0.594		173847.128	ug/L	63.334	
72 Ge					1089626.147	ug/L	1120768.790	
108 Cd		98.919584	1.531		12825.340	ug/L	6.630	
114 Cd		98.986010	0.733		425914.007	ug/L	161.553	
115 In					990231.595	ug/L	1026270.412	
106 Pd		98.743069	0.703		16749.683	ug/L	10.667	
83 Kr		176.316052	111.970		425.677	ug/L	403.343	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	97.221
Cd	111	
In-1	115	96.488

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            97.221
	Cd	108
	Cd	114
>	In	115            96.488
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: CCB 1**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:38:14

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCB 1.016

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1366237.685	ug/L		1499711.762
27 Al	-0.530594	11.957			19762.293	ug/L		22630.227
44 Ca	-5.437053	13.366			12100.699	ug/L		13916.058
52 Cr	-0.766589	2.263			29394.626	ug/L		37802.824
55 Mn	-0.008552	8.762			1140.074	ug/L		1286.095
59 Co	0.001295	32.832			72.334	ug/L		58.000
60 Ni	-0.000074	2352.200			41.983	ug/L		42.670
65 Cu	0.004142	170.570			98.399	ug/L		89.432
75 As	0.151619	153.400			18316.898	ug/L		18209.848
72 Ge-1					1107456.620	ug/L		1120768.790
111 Cd	0.004196	228.107			76.453	ug/L		69.938
115 In-1					1008474.147	ug/L		1026270.412
50 Cr	-0.128585	49.588			-120.707	ug/L		-91.740
53 Cr	-15.416080	7.011			35581.456	ug/L		42231.502
61 Ni	2.061768	78.135			1959.615	ug/L		1897.910
63 Cu	0.004455	114.302			70.667	ug/L		63.334
72 Ge					1107456.620	ug/L		1120768.790
108 Cd	0.038216	56.825			11.568	ug/L		6.630
114 Cd	0.000336	802.223			160.308	ug/L		161.553
115 In					1008474.147	ug/L		1026270.412
106 Pd	0.001966	600.001			11.000	ug/L		10.667
83 Kr	231.579584	129.021			432.677	ug/L		403.343

**Internal Standard Recoveries**

Analyte	Mass	Int Std	% Recovery
Sc	45		
Al	27		
Ca	44		
Cr	52		
Mn	55		
Co	59		
Ni	60		
Cu	65		
As	75		
Ge-1	72	98.812	
Cd	111		
In-1	115	98.266	

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            98.812
	Cd	108
	Cd	114
>	In	115            98.266
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: BLK RECAL**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:38:14

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCB 1.016

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1366237.685		ug/L	
27 Al					19762.293		ug/L	
44 Ca					12100.699		ug/L	
52 Cr					29394.626		ug/L	
55 Mn					1140.074		ug/L	
59 Co					72.334		ug/L	
60 Ni					41.983		ug/L	
65 Cu					98.399		ug/L	
75 As					18316.898		ug/L	
72 Ge-1					1107456.620		ug/L	
111 Cd					76.453		ug/L	
115 In-1					1008474.147		ug/L	
50 Cr					-120.707		ug/L	
53 Cr					35581.456		ug/L	
61 Ni					1959.615		ug/L	
63 Cu					70.667		ug/L	
72 Ge					1107456.620		ug/L	
108 Cd					11.568		ug/L	
114 Cd					160.308		ug/L	
115 In					1008474.147		ug/L	
106 Pd					11.000		ug/L	
83 Kr					432.677		ug/L	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	
Cd	111	
In-1	115	

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72
	Cd	108
	Cd	114
>	In	115
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: STD1 RECAL**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:34:44

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCV 1.015

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1373929.578	ug/L		1366237.685
27 Al	5100.000000	0.487	20533786.530		ug/L		19762.293	
44 Ca	5100.000000	0.264	1386213.494		ug/L		12100.699	
52 Cr	100.000000	0.789	1025257.069		ug/L		29394.626	
55 Mn	100.000000	1.412	1459277.715		ug/L		1140.074	
59 Co	100.000000	0.923	1104489.076		ug/L		72.334	
60 Ni	100.000000	0.513	233132.149		ug/L		41.983	
65 Cu	100.000000	1.800	233380.641		ug/L		98.399	
75 As	100.000000	0.935	230323.019		ug/L		18316.898	
72 Ge-1			1089626.147		ug/L		1107456.620	
111 Cd	100.000000	1.311	183603.297		ug/L		76.453	
115 In-1			990231.595		ug/L		1008474.147	
50 Cr	100.000000	8.028	22017.532		ug/L		-120.707	
53 Cr	100.000000	3.508	76202.591		ug/L		35581.456	
61 Ni	100.000000	2.301	5590.998		ug/L		1959.615	
63 Cu	100.000000	0.594	173847.128		ug/L		70.667	
72 Ge			1089626.147		ug/L		1107456.620	
108 Cd	100.000000	1.531	12825.340		ug/L		11.568	
114 Cd	100.000000	0.733	425914.007		ug/L		160.308	
115 In			990231.595		ug/L		1008474.147	
106 Pd	100.000000	0.703	16749.683		ug/L		11.000	
83 Kr	100.000000	357.236	425.677		ug/L		432.677	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	
Cd	111	
In-1	115	

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72
	Cd	108
	Cd	114
>	In	115
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: CCV 2**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:41:43

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCV 2.017

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1364778.910	ug/L	1366237.685	
27 Al	5259.248095	0.744			21148403.270	ug/L	19762.293	
44 Ca	5109.568738	0.447			1387069.634	ug/L	12100.699	
52 Cr	99.673119	1.075			1020765.022	ug/L	29394.626	
55 Mn	100.612520	0.354			1466326.270	ug/L	1140.074	
59 Co	101.357604	0.762			1118109.706	ug/L	72.334	
60 Ni	101.237064	0.157			235719.206	ug/L	41.983	
65 Cu	99.711214	0.595			232398.756	ug/L	98.399	
75 As	99.451839	0.557			228889.520	ug/L	18316.898	
72 Ge-1					1088282.799	ug/L	1107456.620	
111 Cd	99.015935	0.409			182327.785	ug/L	76.453	
115 In-1					993042.587	ug/L	1008474.147	
50 Cr	108.010405	3.213			23753.923	ug/L	-120.707	
53 Cr	98.867666	2.837			75640.731	ug/L	35581.456	
61 Ni	99.513240	1.498			5566.287	ug/L	1959.615	
63 Cu	99.385130	1.055			172555.848	ug/L	70.667	
72 Ge					1088282.799	ug/L	1107456.620	
108 Cd	99.798168	1.640			12836.742	ug/L	11.568	
114 Cd	99.388751	0.381			424539.336	ug/L	160.308	
115 In					993042.587	ug/L	1008474.147	
106 Pd	101.282945	1.398			16964.431	ug/L	11.000	
83 Kr	223.809139	72.496			417.010	ug/L	432.677	

**Internal Standard Recoveries**

Analyte Mass Inf Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.269
Cd	111	
In-1	115	98.470

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72 98.269
	Cd	108
	Cd	114
>	In	115 98.470
	Pd	106
	Kr	83

**Sample ID: CCB 2**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 18:45:12

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCB 2.018

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1383604.891	ug/L	1366237.685
27 Al	0.201483	98.042	20336.608	ug/L	19762.293
44 Ca	2.663698	135.282	12665.841	ug/L	12100.699
52 Cr	0.085640	106.026	29899.999	ug/L	29394.626
55 Mn	0.002357	143.193	1160.744	ug/L	1140.074
59 Co	0.002987	57.294	104.667	ug/L	72.334
60 Ni	0.005335	20.469	54.033	ug/L	41.983
65 Cu	-0.008319	39.619	77.909	ug/L	98.399
75 As	0.407086	150.804	18958.121	ug/L	18316.898
72 Ge-1			1094838.755	ug/L	1107456.620
111 Cd	-0.008236	48.882	60.295	ug/L	76.453
115 In-1			997597.687	ug/L	1008474.147
50 Cr	0.081719	136.359	-100.702	ug/L	-120.707
53 Cr	0.535594	741.531	35367.730	ug/L	35581.456
61 Ni	-2.360778	67.152	1849.881	ug/L	1959.615
63 Cu	-0.001262	185.942	67.667	ug/L	70.667
72 Ge			1094838.755	ug/L	1107456.620
108 Cd	-0.026834	173.406	8.050	ug/L	11.568
114 Cd	0.000878	712.134	161.930	ug/L	160.308
115 In			997597.687	ug/L	1008474.147
106 Pd	-0.013940	193.254	8.667	ug/L	11.000
83 Kr	438.092661	128.090	402.009	ug/L	432.677

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.861
Cd	111	
In-1	115	98.921

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            98.861
	Cd	108
	Cd	114
>	In	115            98.921
	Pd	106
	Kr	83

**Sample ID: JL4Q2B**

Sample Description: G6L260000-54 BLK

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 18:48:42

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JL4Q2B.019

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 20

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1330652.567	ug/L	1366237.685
27 Al	2.169894	3.905	28812.696	ug/L	19762.293
44 Ca	127.934078	0.518	47436.572	ug/L	12100.699
52 Cr	-0.549570	10.083	23979.156	ug/L	29394.626
55 Mn	0.772036	1.594	12659.819	ug/L	1140.074
59 Co	0.006742	39.363	149.001	ug/L	72.334
60 Ni	0.246319	2.303	629.519	ug/L	41.983
65 Cu	0.307549	2.421	832.784	ug/L	98.399
75 As	0.219627	74.949	18908.456	ug/L	18316.898
72 Ge-1			1114446.790	ug/L	1107456.620
111 Cd	-0.009773	23.272	59.479	ug/L	76.453
115 In-1			1030963.539	ug/L	1008474.147
50 Cr	0.911666	27.187	85.084	ug/L	-120.707
53 Cr	-50.071476	4.259	14713.314	ug/L	35581.456
61 Ni	1.037408	348.209	2011.316	ug/L	1959.615
63 Cu	0.306208	5.810	615.394	ug/L	70.667
72 Ge			1114446.790	ug/L	1107456.620
108 Cd	-0.033545	124.580	7.358	ug/L	11.568
114 Cd	-0.005028	36.117	141.613	ug/L	160.308
115 In			1030963.539	ug/L	1008474.147
106 Pd	0.013940	193.254	13.333	ug/L	11.000
83 Kr	390.474357	104.530	405.343	ug/L	432.677

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	100.631
Cd	111	
In-1	115	102.230

Cr	50	
Cr	53	
Ni	61	
Cu	63	
> Ge	72	100.631
Cd	108	
Cd	114	
> In	115	102.230
Pd	106	
Kr	83	

**Sample ID: JL4Q2C**

Sample Description: G6L260000-54 LCS

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 18:52:10

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JL4Q2C.020

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 101

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1386102.744	ug/L	1366237.685
27 Al	987.425830	1.140	3951578.004	ug/L	19762.293
44 Ca	1279.132011	1.089	353021.202	ug/L	12100.699
52 Cr	178.306791	0.930	1787436.037	ug/L	29394.626
55 Mn	194.817258	0.482	2813280.997	ug/L	1140.074
59 Co	182.319589	1.273	1993541.481	ug/L	72.334
60 Ni	193.367558	0.403	446252.578	ug/L	41.983
65 Cu	190.546392	0.352	440151.987	ug/L	98.399
75 As	177.115406	0.794	390112.164	ug/L	18316.898
72 Ge-1			1078755.802	ug/L	1107456.620
111 Cd	180.962227	1.398	338179.339	ug/L	76.453
115 In-1			1008030.789	ug/L	1008474.147
50 Cr	183.500063	1.708	40090.401	ug/L	-120.707
53 Cr	147.499981	4.142	94818.042	ug/L	35581.456
61 Ni	195.328743	2.115	8991.586	ug/L	1959.615
63 Cu	188.960815	0.385	325151.451	ug/L	70.667
72 Ge			1078755.802	ug/L	1107456.620
108 Cd	179.028074	2.285	23365.438	ug/L	11.568
114 Cd	179.705051	0.883	779035.717	ug/L	160.308
115 In			1008030.789	ug/L	1008474.147
106 Pd	185.011115	1.939	30979.425	ug/L	11.000
83 Kr	-180.951287	177.997	445.345	ug/L	432.677

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	97.408
Cd	111	
In-1	115	99.956

Report Date/Time: Thursday, December 28, 2006 08:55:08

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Sample ID: JL4Q2C

G6L200192

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	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            97.408
	Cd	108
	Cd	114
>	In	115            99.956
	Pd	106
	Kr	83

BJones

**Sample ID: JL4Q2L**

Sample Description: G6L260000-54 LCSD

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 18:55:34

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JL4Q2L.021

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 102

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1360285.050	ug/L	1366237.685
27 Al	976.507537	1.505	3872886.281	ug/L	19762.293
44 Ca	1236.569640	1.774	338633.200	ug/L	12100.699
52 Cr	176.084373	0.775	1749669.056	ug/L	29394.626
55 Mn	196.055924	0.491	2805958.777	ug/L	1140.074
59 Co	180.751680	1.265	1958633.080	ug/L	72.334
60 Ni	193.712389	0.644	443054.654	ug/L	41.983
65 Cu	190.358020	1.045	435836.282	ug/L	98.399
75 As	178.198466	1.053	388876.264	ug/L	18316.898
72 Ge-1			1069158.189	ug/L	1107456.620
111 Cd	180.060361	1.220	332604.508	ug/L	76.453
115 In-1			996423.478	ug/L	1008474.147
50 Cr	187.985981	4.948	40696.741	ug/L	-120.707
53 Cr	145.515198	1.909	93169.683	ug/L	35581.456
61 Ni	194.012161	3.283	8863.557	ug/L	1959.615
63 Cu	188.167292	0.723	320933.807	ug/L	70.667
72 Ge			1069158.189	ug/L	1107456.620
108 Cd	181.880300	0.351	23465.397	ug/L	11.568
114 Cd	179.924695	1.187	770977.780	ug/L	160.308
115 In			996423.478	ug/L	1008474.147
106 Pd	184.649319	0.458	30918.865	ug/L	11.000
83 Kr	-99.999017	241.736	439.678	ug/L	432.677

**Internal Standard Recoveries**

Analyte	Mass	Int Std	% Recovery
Sc	45		
Al	27		
Ca	44		
Cr	52		
Mn	55		
Co	59		
Ni	60		
Cu	65		
As	75		
Ge-1	72		96.542
Cd	111		
In-1	115		98.805

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72 96.542
	Cd	108
	Cd	114
>	In	115 98.805
	Pd	106
	Kr	83

BJones

**Sample ID: JLVQR**

Sample Description: G6L200192-1

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 18:58:59

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JLVQR.022

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 27

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1358152.658	ug/L	1366237.685
27 Al	206.969913	3.136	853926.720	ug/L	19762.293
44 Ca	474.434754	1.696	140087.252	ug/L	12100.699
52 Cr	1.138227	8.336	40355.866	ug/L	29394.626
55 Mn	9.027052	0.854	133072.757	ug/L	1140.074
59 Co	0.513439	2.032	5756.227	ug/L	72.334
60 Ni	0.854739	3.591	2038.578	ug/L	41.983
65 Cu	17.503999	1.585	41029.313	ug/L	98.399
75 As	0.327377	52.333	18761.580	ug/L	18316.898
72 Ge-1			1092293.244	ug/L	1107456.620
111 Cd	0.069785	32.133	208.647	ug/L	76.453
115 In-1			1016207.716	ug/L	1008474.147
50 Cr	2.338743	8.571	399.876	ug/L	-120.707
53 Cr	-50.501711	4.472	14237.431	ug/L	35581.456
61 Ni	-2.396458	22.168	1844.878	ug/L	1959.615
63 Cu	17.638445	0.587	30796.689	ug/L	70.667
72 Ge			1092293.244	ug/L	1107456.620
108 Cd	1.360500	15.645	190.518	ug/L	11.568
114 Cd	0.037512	10.425	325.360	ug/L	160.308
115 In			1016207.716	ug/L	1008474.147
106 Pd	2.702397	2.562	463.346	ug/L	11.000
83 Kr	561.901908	38.835	393.342	ug/L	432.677

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.631
Cd	111	
In-1	115	100.767

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72
	Cd	108
	Cd	114
>	In	115
	Pd	106
	Kr	83

98.631

100.767

BJones

**Sample ID: JLVQRP5**

Sample Description: G6L200192-1 5X

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 19:02:25

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JLVQRP5.023

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 28

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1391983.362	ug/L	1366237.685
27 Al	46.259900	0.708	207474.249	ug/L	19762.293
44 Ca	101.223416	1.876	39552.194	ug/L	12100.699
52 Cr	0.623055	13.706	35461.071	ug/L	29394.626
55 Mn	1.831942	1.455	28095.705	ug/L	1140.074
59 Co	0.103822	4.389	1229.086	ug/L	72.334
60 Ni	0.172774	4.152	448.141	ug/L	41.983
65 Cu	3.872868	1.671	9216.815	ug/L	98.399
75 As	0.106346	349.410	18416.583	ug/L	18316.898
72 Ge-1			1099967.337	ug/L	1107456.620
111 Cd	0.004799	77.142	84.131	ug/L	76.453
115 In-1			992831.518	ug/L	1008474.147
50 Cr	0.476085	8.658	-13.575	ug/L	-120.707
53 Cr	-11.022345	21.614	30757.055	ug/L	35581.456
61 Ni	-3.639846	30.714	1811.859	ug/L	1959.615
63 Cu	3.857330	2.261	6836.137	ug/L	70.667
72 Ge			1099967.337	ug/L	1107456.620
108 Cd	0.216002	41.514	39.089	ug/L	11.568
114 Cd	0.010621	24.737	203.148	ug/L	160.308
115 In			992831.518	ug/L	1008474.147
106 Pd	0.503826	15.791	95.334	ug/L	11.000
83 Kr	342.855860	84.403	408.676	ug/L	432.677

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	99.324
Cd	111	
In-1	115	98.449

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72 99.324
	Cd	108
	Cd	114
>	In	115 98.449
	Pd	106
	Kr	83

BJones

**Sample ID: JLVQRZ**

Sample Description: G6L200192-1 PS

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 19:05:50

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JLVQRZ.024

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 29

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1368961.889	ug/L	1366237.685
27 Al	1252.954423	0.511	5018432.336	ug/L	19762.293
44 Ca	1669.256327	0.605	457997.052	ug/L	12100.699
52 Cr	191.282212	0.808	1919124.304	ug/L	29394.626
55 Mn	214.548651	0.429	3104154.015	ug/L	1140.074
59 Co	196.063250	0.739	2147932.772	ug/L	72.334
60 Ni	208.386604	1.036	481851.815	ug/L	41.983
65 Cu	222.134634	1.198	514098.495	ug/L	98.399
75 As	194.675259	0.254	427860.101	ug/L	18316.898
72 Ge-1			1080842.784	ug/L	1107456.620
111 Cd	194.467754	0.859	362139.150	ug/L	76.453
115 In-1			1004424.474	ug/L	1008474.147
50 Cr	202.035998	3.395	44235.951	ug/L	-120.707
53 Cr	163.182513	3.290	101395.115	ug/L	35581.456
61 Ni	208.842803	2.877	9499.754	ug/L	1959.615
63 Cu	218.810981	1.272	377248.584	ug/L	70.667
72 Ge			1080842.784	ug/L	1107456.620
108 Cd	194.505301	1.383	25294.766	ug/L	11.568
114 Cd	193.986267	0.293	837960.007	ug/L	160.308
115 In			1004424.474	ug/L	1008474.147
106 Pd	204.013812	1.355	34160.226	ug/L	11.000
83 Kr	561.901746	58.658	393.342	ug/L	432.677

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	97.597
Cd	111	
In-1	115	99.598

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            97.597
	Cd	108
	Cd	114
>	In	115            99.598
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: JLVQW**

Sample Description: G6L200192-2

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 19:09:16

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JLVQW.025

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 30

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1400971.361	ug/L	1366237.685	
27 Al	238.014086	1.757			982808.140	ug/L	19762.293	
44 Ca	602.547374	0.410			175321.944	ug/L	12100.699	
52 Cr	1.356354	1.165			42688.893	ug/L	29394.626	
55 Mn	10.733292	0.232			158568.098	ug/L	1140.074	
59 Co	0.490704	1.150			5523.076	ug/L	72.334	
60 Ni	0.860375	1.879			2058.670	ug/L	41.983	
65 Cu	11.377391	0.366			26795.405	ug/L	98.399	
75 As	0.521659	48.364			19239.692	ug/L	18316.898	
72 Ge-1					1096148.153	ug/L	1107456.620	
111 Cd	0.099703	15.970			263.553	ug/L	76.453	
115 In-1					1010426.533	ug/L	1008474.147	
50 Cr	2.618216	41.819			464.303	ug/L	-120.707	
53 Cr	-50.133928	4.793			14452.823	ug/L	35581.456	
61 Ni	-4.356115	28.470			1779.173	ug/L	1959.615	
63 Cu	11.643571	3.034			20420.860	ug/L	70.667	
72 Ge					1096148.153	ug/L	1107456.620	
108 Cd	1.367170	13.928			190.187	ug/L	11.568	
114 Cd	0.056722	9.355			407.011	ug/L	160.308	
115 In					1010426.533	ug/L	1008474.147	
106 Pd	2.847776	3.333			487.680	ug/L	11.000	
83 Kr	180.951404	321.559			420.010	ug/L	432.677	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.979
Cd	111	
In-1	115	100.194

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            98.979
	Cd	108
	Cd	114
>	In	115            100.194
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: JLVQ1**

Sample Description: G6L200192-3

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 19:12:43

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JLVQ1.026

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 31

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1383404.728	ug/L	1366237.685	
27 Al	482.325893	3.231			1956347.803	ug/L	19762.293	
44 Ca	701.781919	2.373			200708.329	ug/L	12100.699	
52 Cr	1.430334	2.813			43113.976	ug/L	29394.626	
55 Mn	16.896636	1.406			247128.015	ug/L	1140.074	
59 Co	0.373542	2.243			4190.337	ug/L	72.334	
60 Ni	1.012674	1.064			2398.662	ug/L	41.983	
65 Cu	23.969484	0.626			55931.980	ug/L	98.399	
75 As	0.654964	21.581			19384.417	ug/L	18316.898	
72 Ge-1					1088169.548	ug/L	1107456.620	
111 Cd	0.098733	12.234			259.403	ug/L	76.453	
115 In-1					1003047.413	ug/L	1008474.147	
50 Cr	4.527575	21.442			880.408	ug/L	-120.707	
53 Cr	-48.541121	4.270			15003.050	ug/L	35581.456	
61 Ni	-1.704791	70.519			1862.889	ug/L	1959.615	
63 Cu	23.827320	0.690			41417.676	ug/L	70.667	
72 Ge					1088169.548	ug/L	1107456.620	
108 Cd	1.379740	5.792			190.559	ug/L	11.568	
114 Cd	0.053876	11.802			391.590	ug/L	160.308	
115 In					1003047.413	ug/L	1008474.147	
106 Pd	2.955318	2.272			505.681	ug/L	11.000	
83 Kr	357.141401	93.836			407.676	ug/L	432.677	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.258
Cd	111	
In-1	115	99.462

Cr	50	
Cr	53	
Ni	61	
Cu	63	
> Ge	72	98.258
Cd	108	
Cd	114	
> In	115	99.462
Pd	106	
Kr	83	

**Sample ID: JLVQ3**

Sample Description: G6L200192-4

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 19:16:10

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JLVQ3.027

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 32

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1412817.802	ug/L	1366237.685
27 Al	266.950861	1.981	1108728.143	ug/L	19762.293
44 Ca	510.607598	1.822	151627.620	ug/L	12100.699
52 Cr	1.458102	3.525	44069.380	ug/L	29394.626
55 Mn	9.757762	0.524	145443.859	ug/L	1140.074
59 Co	0.230424	1.125	2653.402	ug/L	72.334
60 Ni	0.759160	1.999	1836.696	ug/L	41.983
65 Cu	20.029978	0.304	47490.768	ug/L	98.399
75 As	0.296751	17.854	18919.465	ug/L	18316.898
72 Ge-1			1105210.520	ug/L	1107456.620
111 Cd	0.078680	16.150	226.412	ug/L	76.453
115 In-1			1021175.339	ug/L	1008474.147
50 Cr	2.522028	34.428	445.446	ug/L	-120.707
53 Cr	-47.350086	5.912	15734.700	ug/L	35581.456
61 Ni	-3.176333	81.722	1837.541	ug/L	1959.615
63 Cu	20.104815	1.344	35507.287	ug/L	70.667
72 Ge			1105210.520	ug/L	1107456.620
108 Cd	1.223388	16.171	173.246	ug/L	11.568
114 Cd	0.038579	1.994	331.685	ug/L	160.308
115 In			1021175.339	ug/L	1008474.147
106 Pd	2.706380	2.208	464.012	ug/L	11.000
83 Kr	428.569139	112.858	402.676	ug/L	432.677

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	99.797
Cd	111	
In-1	115	101.259

Cr	50	
Cr	53	
Ni	61	
Cu	63	
> Ge	72	99.797
Cd	108	
Cd	114	
> In	115	101.259
Pd	106	
Kr	83	

BJones

**Sample ID: JLVQ4**

Sample Description: G6L200192-5

Batch ID: 6360054

Sample Date/Time: Wednesday, December 27, 2006 19:19:37

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\JLVQ4.028

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 33

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1443094.571	ug/L	1366237.685
27 Al	906.132305	1.746	3725806.805	ug/L	19762.293
44 Ca	1234.449295	0.507	350360.762	ug/L	12100.699
52 Cr	2.220497	4.436	51906.223	ug/L	29394.626
55 Mn	31.038323	1.027	461313.750	ug/L	1140.074
59 Co	0.730621	0.270	8277.247	ug/L	72.334
60 Ni	1.532301	0.556	3673.666	ug/L	41.983
65 Cu	66.816745	0.461	158586.120	ug/L	98.399
75 As	0.684448	21.376	19803.654	ug/L	18316.898
72 Ge-1			1107968.703	ug/L	1107456.620
111 Cd	0.095993	20.515	261.981	ug/L	76.453
115 In-1			1031988.951	ug/L	1008474.147
50 Cr	8.540672	22.692	1802.380	ug/L	-120.707
53 Cr	-47.402718	6.661	15747.782	ug/L	35581.456
61 Ni	-2.618755	120.838	1862.890	ug/L	1959.615
63 Cu	65.927651	0.614	116564.552	ug/L	70.667
72 Ge			1107968.703	ug/L	1107456.620
108 Cd	0.715955	25.102	107.447	ug/L	11.568
114 Cd	0.062136	16.472	439.939	ug/L	160.308
115 In			1031988.951	ug/L	1008474.147
106 Pd	2.124865	10.862	366.674	ug/L	11.000
83 Kr	-38.094435	564.174	435.344	ug/L	432.677

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	100.046
Cd	111	
In-1	115	102.332

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72        100.046
	Cd	108
	Cd	114
>	In	115        102.332
	Pd	106
	Kr	83

BJones

**Sample ID: CCV 3**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 19:23:06

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCV 3.029

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1417005.536	ug/L	1366237.685
27 Al	5774.328109	1.912	23460631.454	ug/L	19762.293
44 Ca	5482.780940	1.611	1503113.340	ug/L	12100.699
52 Cr	102.922494	2.199	1063996.035	ug/L	29394.626
55 Mn	103.373461	1.625	1522294.195	ug/L	1140.074
59 Co	102.091787	1.698	1137963.971	ug/L	72.334
60 Ni	103.001122	2.178	242315.064	ug/L	41.983
65 Cu	101.461016	2.410	238933.931	ug/L	98.399
75 As	100.932223	2.427	234427.380	ug/L	18316.898
72 Ge-1			1099986.928	ug/L	1107456.620
111 Cd	99.819366	1.966	133165.473	ug/L	76.453
115 In-1			939750.298	ug/L	1008474.147
50 Cr	105.298255	6.014	23381.485	ug/L	-120.707
53 Cr	107.540109	2.994	30047.313	ug/L	35581.456
61 Ni	99.689329	2.202	5631.069	ug/L	1959.615
63 Cu	101.293744	2.506	177689.136	ug/L	70.667
72 Ge			1099986.928	ug/L	1107456.620
108 Cd	100.113260	2.135	12831.894	ug/L	11.568
114 Cd	100.423367	1.180	427477.313	ug/L	160.308
115 In			939750.298	ug/L	1008474.147
106 Pd	99.848379	1.693	16724.304	ug/L	11.000
83 Kr	14.286008	2804.097	431.677	ug/L	432.677

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	99.326
Cd	111	
In-1	115	98.143

Cr	50	
Cr	53	
Ni	61	
Cu	63	
> Ge	72	99.326
Cd	108	
Cd	114	
> In	115	98.143
Pd	106	
Kr	83	

Sample ID: CCB 3

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 19:26:35

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCB 3.030

Tuning File: c:\elandata\Tuning\default.fun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1439060.121	ug/L	1366237.685
27 Al	0.495478	9.704	22018.336	ug/L	19762.293
44 Ca	5.894217	6.432	13859.968	ug/L	12100.699
52 Cr	0.417110	6.339	33974.501	ug/L	29394.626
55 Mn	0.006921	13.372	1255.757	ug/L	1140.074
59 Co	0.002868	35.285	105.667	ug/L	72.334
60 Ni	-0.000971	429.766	40.118	ug/L	41.983
65 Cu	-0.000724	215.866	97.712	ug/L	98.399
75 As	0.060888	152.213	18642.973	ug/L	18316.898
72 Ge-1			1119200.829	ug/L	1107456.620
111 Cd	-0.006245	114.714	65.287	ug/L	76.453
115 In-1			1016870.904	ug/L	1008474.147
50 Cr	-0.150079	87.210	-156.160	ug/L	-120.707
53 Cr	-0.271950	603.175	35843.785	ug/L	35581.456
61 Ni	-4.333910	22.003	1817.529	ug/L	1959.615
63 Cu	0.000530	1251.031	72.334	ug/L	70.667
72 Ge			1119200.829	ug/L	1107456.620
108 Cd	-0.007292	560.097	10.717	ug/L	11.568
114 Cd	0.001109	90.621	166.491	ug/L	160.308
115 In			1016870.904	ug/L	1008474.147
106 Pd	-0.003983	567.891	10.333	ug/L	11.000
83 Kr	38.095479	992.147	430.011	ug/L	432.677

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	101.060
Cd	111	
In-1	115	100.833

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72 101.060
	Cd	108
	Cd	114
>	In	115 100.833
	Pd	106
	Kr	83

**Sample ID: BLK RECAL**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 19:26:35

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCB 3.030

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1439060.121	ug/L	
27 Al			22018.336	ug/L	
44 Ca			13859.968	ug/L	
52 Cr			33974.501	ug/L	
55 Mn			1255.757	ug/L	
59 Co			105.667	ug/L	
60 Ni			40.118	ug/L	
65 Cu			97.712	ug/L	
75 As			18642.973	ug/L	
72 Ge-1			1119200.829	ug/L	
111 Cd			65.287	ug/L	
115 In-1			1016870.904	ug/L	
50 Cr			-156.160	ug/L	
53 Cr			35843.785	ug/L	
61 Ni			1817.529	ug/L	
63 Cu			72.334	ug/L	
72 Ge			1119200.829	ug/L	
108 Cd			10.717	ug/L	
114 Cd			166.491	ug/L	
115 In			1016870.904	ug/L	
106 Pd			10.333	ug/L	
83 Kr			430.011	ug/L	

### Internal Standard Recoveries

Analyte	Mass	Int Std % Recovery
---------	------	--------------------

Sc 45

Al 27

Ca 44

Cr 52

Mn 55

Co 59

Ni 60

Cu 65

As 75

Ge-1 72

Cd 111

In-1 115

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72
	Cd	108
	Cd	114
>	In	115
	Pd	106
	Kr	83

BJones

**Sample ID: STD1 RECAL**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 19:23:06

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCV 3.029

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1417005.536	ug/L	1439060.121	
27 Al	5100.000000	1.912	23450631.454		ug/L	22018.336		
44 Ca	5100.000000	1.613	1503113.340		ug/L	13859.968		
52 Cr	100.000000	2.208	1063996.035		ug/L	33974.501		
55 Mn	100.000000	1.625	1522294.195		ug/L	1255.757		
59 Co	100.000000	1.698	1137963.971		ug/L	105.667		
60 Ni	100.000000	2.178	242315.064		ug/L	40.118		
65 Cu	100.000000	2.410	238933.931		ug/L	97.712		
75 As	100.000000	2.428	234427.380		ug/L	18642.973		
72 Ge-1			1099986.928		ug/L	1119200.829		
111 Cd	100.000000	1.966	183165.473		ug/L	65.287		
115 In-1			989750.298		ug/L	1016870.904		
50 Cr	100.000000	6.005	23381.485		ug/L	-156.160		
53 Cr	100.000000	2.986	80047.313		ug/L	35843.785		
61 Ni	100.000000	2.110	5631.069		ug/L	1817.529		
63 Cu	100.000000	2.506	177689.136		ug/L	72.334		
72 Ge			1099986.928		ug/L	1119200.829		
108 Cd	100.000000	2.134	12831.894		ug/L	10.717		
114 Cd	100.000000	1.180	427477.313		ug/L	166.491		
115 In			989750.298		ug/L	1016870.904		
106 Pd	100.000000	1.692	16724.304		ug/L	10.333		
83 Kr	100.000000	1682.497	431.677		ug/L	430.011		

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	
Cd	111	
In-1	115	

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72
	Cd	108
	Cd	114
>	In	115
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: CCV 4**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 19:30:05

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCV 4.031

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1414522.326	ug/L	1439060.121	
27 Al	4950.538760	0.160	23032618.015		ug/L	22018.336		
44 Ca	4969.863172	1.158	1435085.471		ug/L	13859.968		
52 Cr	97.801149	0.995	1055535.893		ug/L	33974.501		
55 Mn	98.145039	0.391	1514357.896		ug/L	1255.757		
59 Co	97.869274	0.742	1128841.327		ug/L	105.667		
60 Ni	97.985900	0.498	240692.473		ug/L	40.118		
65 Cu	98.646820	0.234	238925.604		ug/L	97.712		
75 As	98.167214	0.508	233616.972		ug/L	18642.973		
72 Ge-1			1114623.510		ug/L	1119200.829		
111 Cd	100.829477	0.865	183357.141		ug/L	65.287		
115 In-1			982503.224		ug/L	1016870.904		
50 Cr	97.557009	1.882	23137.255		ug/L	-156.160		
53 Cr	92.438136	1.301	77688.965		ug/L	35843.785		
61 Ni	98.840967	1.460	5662.125		ug/L	1817.529		
63 Cu	97.999582	1.489	176512.907		ug/L	72.334		
72 Ge			1114623.510		ug/L	1119200.829		
108 Cd	100.990611	0.587	12867.108		ug/L	10.717		
114 Cd	100.681064	1.372	427248.647		ug/L	166.491		
115 In			982503.224		ug/L	1016870.904		
106 Pd	102.661598	1.132	17169.163		ug/L	10.333		
83 Kr	-220.000710	355.939	426.344		ug/L	430.011		

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	99.591
Cd	111	
In-1	115	96.620

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            99.591
	Cd	108
	Cd	114
>	In	115            96.620
	Pd	106
	Kr	83

**Sample ID: CCB 4**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 19:33:34

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCB 4.032

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1442174.864	ug/L	1439060.121
27 Al	0.089540	23.988	22756.888	ug/L	22018.336
44 Ca	-0.965679	94.435	13766.491	ug/L	13859.968
52 Cr	-0.105531	45.043	33337.402	ug/L	33974.501
55 Mn	0.001322	253.684	1294.429	ug/L	1255.757
59 Co	0.002254	12.361	133.668	ug/L	105.667
60 Ni	0.001313	139.761	43.995	ug/L	40.118
65 Cu	0.001893	164.535	103.744	ug/L	97.712
75 As	-0.082500	234.257	18726.688	ug/L	18642.973
72 Ge-1			1135171.157	ug/L	1119200.829
111 Cd	-0.000421	1793.296	64.240	ug/L	65.287
115 In-1			1014716.869	ug/L	1016870.904
50 Cr	0.084388	190.933	-137.936	ug/L	-156.160
53 Cr	-1.746528	76.704	35549.804	ug/L	35843.785
61 Ni	-1.173658	254.353	1796.518	ug/L	1817.529
63 Cu	-0.008006	36.267	58.667	ug/L	72.334
72 Ge			1135171.157	ug/L	1119200.829
108 Cd	0.016078	223.147	12.840	ug/L	10.717
114 Cd	0.005924	95.902	192.140	ug/L	166.491
115 In			1014716.869	ug/L	1016870.904
106 Pd	-0.007977	75.000	9.000	ug/L	10.333
83 Kr	-579.999931	83.616	420.343	ug/L	430.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	101.427
Cd	111	
In-1	115	99.788

Cr	50	
Cr	53	
Ni	61	
Cu	63	
> Ge	72	101.427
Cd	108	
Cd	114	
> In	115	99.788
Pd	106	
Kr	83	

BJones

**Sample ID: CCV 5**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:11:25

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCV 5.043

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1454382.447	ug/L		1439060.121
27 Al	5372.575927	0.769			24610537.295	ug/L		22018.336
44 Ca	5202.443181	0.714			1526901.811	ug/L		13859.968
52 Cr	99.745725	1.347			1056994.510	ug/L		33974.501
55 Mn	99.416183	0.543			1507275.968	ug/L		1255.757
59 Co	98.891123	1.242			1120685.846	ug/L		105.667
60 Ni	99.232376	1.452			239463.615	ug/L		40.118
65 Cu	100.441482	1.595			238996.435	ug/L		97.712
75 As	99.410047	1.802			232188.745	ug/L		18642.973
72 Ge-1					1095211.064	ug/L		1119200.829
111 Cd	100.212981	1.502			180876.333	ug/L		65.287
115 In-1					975340.293	ug/L		1016870.904
50 Cr	97.367124	6.965			22674.669	ug/L		-156.160
53 Cr	99.960450	1.909			79700.328	ug/L		35843.785
61 Ni	95.361257	0.939			5430.047	ug/L		1817.529
63 Cu	98.499912	1.225			174323.229	ug/L		72.334
72 Ge					1095211.064	ug/L		1119200.829
108 Cd	100.546885	2.180			12713.153	ug/L		10.717
114 Cd	100.634567	1.888			423849.817	ug/L		166.491
115 In					975340.293	ug/L		1016870.904
106 Pd	101.560570	1.046			16985.137	ug/L		10.333
83 Kr	859.997365	29.047			444.345	ug/L		430.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	97.857
Cd	111	
In-1	115	95.916

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            97.857
	Cd	108
	Cd	114
>	In	115            95.916
	Pd	106
	Kr	83

BJones

**Sample ID: CCB 5**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:14:55

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCB 5.044

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1455596.461	ug/L	1439060.121	
27 Al	0.624162	12.714			24797.758	ug/L	22018.336	
44 Ca	0.783061	35.894			14015.886	ug/L	13859.968	
52 Cr	0.061051	86.151			34420.910	ug/L	33974.501	
55 Mn	0.007863	61.518			1370.441	ug/L	1255.757	
59 Co	0.004475	9.162			156.668	ug/L	105.667	
60 Ni	0.005226	78.775			52.808	ug/L	40.118	
65 Cu	0.002114	168.094			102.249	ug/L	97.712	
75 As	-0.110587	177.736			18295.184	ug/L	18642.973	
72 Ge-1					1113042.663	ug/L	1119200.829	
111 Cd	0.005691	35.748			73.797	ug/L	65.287	
115 In-1					987125.508	ug/L	1016870.904	
50 Cr	0.100024	53.513			-131.574	ug/L	-156.160	
53 Cr	2.124652	126.293			36609.706	ug/L	35843.785	
61 Ni	-2.144378	101.780			1723.476	ug/L	1817.529	
63 Cu	0.004510	58.636			80.001	ug/L	72.334	
72 Ge					1113042.663	ug/L	1119200.829	
108 Cd	-0.013747	195.585			8.630	ug/L	10.717	
114 Cd	0.002499	78.067			172.223	ug/L	166.491	
115 In					987125.508	ug/L	1016870.904	
106 Pd	-0.011966	125.831			8.333	ug/L	10.333	
83 Kr	-1819.994506	28.803			399.676	ug/L	430.011	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	99.450
Cd	111	
In-1	115	97.075

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            99.450
	Cd	108
	Cd	114
>	In	115            97.075
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: CCV 6**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:18:24

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCV 6.045

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1416508.894	ug/L	1439060.121
27 Al	5279.011852	1.029	24226660.510	ug/L	22018.336
44 Ca	5199.011637	0.866	1528540.708	ug/L	13859.968
52 Cr	98.768391	1.422	1048967.839	ug/L	33974.501
55 Mn	98.763279	1.285	1500033.845	ug/L	1255.757
59 Co	99.081540	0.775	1124931.257	ug/L	105.667
60 Ni	98.805352	0.659	238894.701	ug/L	40.118
65 Cu	99.382355	0.602	236936.815	ug/L	97.712
75 As	99.813342	1.359	233511.248	ug/L	18642.973
72 Ge-1			1097168.115	ug/L	1119200.829
111 Cd	100.675150	0.900	181607.116	ug/L	65.287
115 In-1			974586.656	ug/L	1016870.904
50 Cr	101.176154	8.191	23616.729	ug/L	-156.160
53 Cr	97.212387	4.818	78601.606	ug/L	35843.785
61 Ni	99.579887	2.755	5601.684	ug/L	1817.529
63 Cu	99.854830	0.695	177051.099	ug/L	72.334
72 Ge			1097168.115	ug/L	1119200.829
108 Cd	101.008799	0.240	12765.697	ug/L	10.717
114 Cd	100.306028	0.196	422269.872	ug/L	166.491
115 In			974586.656	ug/L	1016870.904
106 Pd	100.571493	2.370	16819.823	ug/L	10.333
83 Kr	-619.999288	164.895	419.677	ug/L	430.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.031
Cd	111	
In-1	115	95.842

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            98.031
	Cd	108
	Cd	114
>	In	115            95.842
	Pd	106
	Kr	83

BJones

**Sample ID: CCB 6**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:21:54

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCB 6.046

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1452346.828	ug/L	1439060.121
27 Al	0.577113	8.691	24446.105	ug/L	22018.336
44 Ca	0.834752	77.455	13953.118	ug/L	13859.968
52 Cr	0.026669	263.397	33878.484	ug/L	33974.501
55 Mn	0.009478	26.930	1387.110	ug/L	1255.757
59 Co	0.005249	16.012	164.668	ug/L	105.667
60 Ni	0.007202	31.422	57.218	ug/L	40.118
65 Cu	0.009068	132.247	118.548	ug/L	97.712
75 As	0.032439	903.201	18507.409	ug/L	18642.973
72 Ge-1			1106900.831	ug/L	1119200.829
111 Cd	0.007992	49.029	77.538	ug/L	65.287
115 In-1			981260.181	ug/L	1016870.904
50 Cr	-0.000982	14639.508	-154.825	ug/L	-156.160
53 Cr	1.338746	189.077	36055.299	ug/L	35843.785
61 Ni	-2.297035	82.889	1708.467	ug/L	1817.529
63 Cu	-0.001400	330.673	69.001	ug/L	72.334
72 Ge			1106900.831	ug/L	1119200.829
108 Cd	-0.034804	62.000	5.902	ug/L	10.717
114 Cd	0.002726	148.583	172.109	ug/L	166.491
115 In			981260.181	ug/L	1016870.904
106 Pd	-0.009972	210.713	8.667	ug/L	10.333
83 Kr	-2999.986368	28.213	380.008	ug/L	430.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.901
Cd	111	
In-1	115	96.498

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            98.901
	Cd	108
	Cd	114
>	In	115            96.498
	Pd	106
	Kr	83

BJones

**Sample ID: LLSTD1**

Sample Description: LL STD @ 10X

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:25:21

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\LLSTD1.047

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 85

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1440697.201	ug/L	1439060.121
27 Al	60.883395	0.746	304987.226	ug/L	22018.336
44 Ca	61.000257	1.096	31805.373	ug/L	13859.968
52 Cr	0.874597	1.374	42896.564	ug/L	33974.501
55 Mn	1.075308	1.307	17798.086	ug/L	1255.757
59 Co	1.017303	1.750	11816.976	ug/L	105.667
60 Ni	1.025535	5.646	2553.705	ug/L	40.118
65 Cu X	1.667354	0.990	4126.817	ug/L	97.712
75 As	0.791542	22.485	20262.831	ug/L	18642.973
72 Ge-1			1112651.782	ug/L	1119200.829
111 Cd	1.011120	1.940	1922.769	ug/L	65.287
115 In-1			993706.426	ug/L	1016870.904
50 Cr	1.650801	21.708	237.835	ug/L	-156.160
53 Cr	-4.728811	31.512	33491.929	ug/L	35843.785
61 Ni	-1.565849	69.825	1746.155	ug/L	1817.529
63 Cu	1.649178	1.840	3036.141	ug/L	72.334
72 Ge			1112651.782	ug/L	1119200.829
108 Cd	0.975929	2.427	136.138	ug/L	10.717
114 Cd	0.972635	2.826	4335.622	ug/L	166.491
115 In			993706.426	ug/L	1016870.904
106 Pd	1.082939	4.500	191.335	ug/L	10.333
83 Kr	-1679.995434	3.571	402.009	ug/L	430.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	99.415
Cd	111	
In-1	115	97.722

Cr	50	
Cr	53	
Ni	61	
Cu	63	
Ge	72	99.415
Cd	108	
Cd	114	
In	115	97.722
Pd	106	
Kr	83	

BJones

**Sample ID: LLSTD2**

Sample Description: LL STD @ 5X

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:28:47

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\LLSTD2.048

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 86

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc. RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc				1421315.899	ug/L	1439060.121	
27 Al	119.379723	0.630		574137.960	ug/L	22018.336	
44 Ca	115.863210	0.977		47776.752	ug/L	13859.968	
52 Cr	1.742041	4.751		51681.531	ug/L	33974.501	
55 Mn	2.151972	0.516		34196.027	ug/L	1255.757	
59 Co	2.040839	1.187		23483.474	ug/L	105.667	
60 Ni	1.982375	1.259		4875.176	ug/L	40.118	
>65 Cu	3.071684	1.105		7483.074	ug/L	97.712	
75 As	1.753403	18.892		22257.302	ug/L	18642.973	
72 Ge-1				1107096.421	ug/L	1119200.829	
111 Cd	1.952706	2.498		3632.721	ug/L	65.287	
115 In-1				987946.889	ug/L	1016870.904	
50 Cr	3.565076	8.241		690.706	ug/L	-156.160	
53 Cr	-9.811387	17.224		31031.394	ug/L	35843.785	
'61 Ni	-0.155276	94.681		1791.847	ug/L	1817.529	
63 Cu	3.040084	0.845		5508.518	ug/L	72.334	
72 Ge				1107096.421	ug/L	1119200.829	
108 Cd	2.143321	10.726		284.512	ug/L	10.717	
114 Cd	1.994192	0.410		8668.518	ug/L	166.491	
115 In				987946.889	ug/L	1016870.904	
106 Pd	1.968453	3.626		339.340	ug/L	10.333	
83 Kr	-679.998330	220.117		418.677	ug/L	430.011	

**Internal Standard Recoveries**

Analyte Mass Inf Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.918
Cd	111	
In-1	115	97.156

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72 98.918
	Cd	108
	Cd	114
>	In	115 97.156
	Pd	106
	Kr	83

BJones

**Sample ID: ICSA**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:32:13

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\ICSA.049

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 2

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1149383.838	ug/L	1439060.121	
27 Al	84045.785293	3.782			327307212.174	ug/L	22018.336	
44 Ca	85953.183313	2.572			21281801.695	ug/L	13859.968	
52 Cr	1.337201	4.537			39960.377	ug/L	33974.501	
55 Mn	5.220735	0.526			68329.429	ug/L	1255.757	
59 Co	2.483701	0.676			24033.294	ug/L	105.667	
60 Ni	2.952293	2.169			6094.133	ug/L	40.118	
65 Cu	0.127038	60.528			338.155	ug/L	97.712	
75 As	0.917960	7.234			17201.206	ug/L	18642.973	
72 Ge-1					931750.692	ug/L	1119200.829	
111 Cd	0.466113	6.355			769.190	ug/L	65.287	
115 In-1					830076.175	ug/L	1016870.904	
50 Cr	301.140005	20.880			59929.653	ug/L	-156.160	
53 Cr	4.270618	51.074			31462.671	ug/L	35843.785	
61 Ni	31.389928	7.645			2536.029	ug/L	1817.529	
63 Cu	5.454315	0.268			8269.928	ug/L	72.334	
72 Ge					931750.692	ug/L	1119200.829	
108 Cd	66.982002	0.985			7212.924	ug/L	10.717	
114 Cd	3.793404	0.404			13732.285	ug/L	166.491	
115 In					830076.175	ug/L	1016870.904	
106 Pd	0.626227	6.265			115.001	ug/L	10.333	
83 Kr	16060.211058	3.742			697.694	ug/L	430.011	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	83.251
Cd	111	
In-1	115	81.630

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            83.251
	Cd	108
	Cd	114
>	In	115            81.630
	Pd	106
	Kr	83

BJones

**Sample ID: ICSAB**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:35:40

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\ICSAB.050

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 1

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1066697.992	ug/L	1439060.121	
27 Al	73182.917060	2.146	279635785.738		ug/L	22018.336		
44 Ca	80102.502334	0.296	19458320.644		ug/L	13859.968		
52 Cr	97.602388	0.610	863977.087		ug/L	33974.501		
55 Mn	105.992680	0.199	1341207.594		ug/L	1255.757		
59 Co	101.135711	0.211	956688.301		ug/L	105.667		
60 Ni	98.047285	0.255	197514.217		ug/L	40.118		
65 Cu	90.947505	0.223	180662.840		ug/L	97.712		
75 As	106.256773	1.200	206116.799		ug/L	18642.973		
72 Ge-1			914112.679		ug/L	1119200.829		
111 Cd	100.560404	0.396	155543.578		ug/L	65.287		
115 In-1			835664.130		ug/L	1016870.904		
50 Cr	389.856828	9.490	76220.641		ug/L	-156.160		
53 Cr	83.121988	4.585	60249.652		ug/L	35843.785		
61 Ni	127.155074	1.705	5548.923		ug/L	1817.529		
63 Cu	97.154294	0.525	143521.127		ug/L	72.334		
72 Ge			914112.679		ug/L	1119200.829		
108 Cd	170.724753	1.363	18495.226		ug/L	10.717		
114 Cd	102.842870	0.567	371227.748		ug/L	166.491		
115 In			835664.130		ug/L	1016870.904		
106 Pd	86.681987	0.683	14498.335		ug/L	10.333		
83 Kr	14340.165005	5.660	669.026		ug/L	430.011		

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	81.675
Cd	111	
In-1	115	82.180

Cr	50	
Cr	53	
Ni	61	
Cu	63	
> Ge	72	81.675
Cd	108	
Cd	114	
> In	115	82.180
Pd	106	
Kr	83	

BJones

**Sample ID: Rinse**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:39:08

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\Rinse.051

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 6

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1232353.153	ug/L	1439060.121	
27 Al	0.715859	24.451			24696.852	ug/L	22018.336	
44 Ca	-3.444394	20.238			12496.257	ug/L	13859.968	
52 Cr	-0.398829	7.286			28995.303	ug/L	33974.501	
55 Mn	-0.005004	24.292			1147.075	ug/L	1255.757	
59 Co	-0.001916	39.588			81.334	ug/L	105.667	
60 Ni	-0.000336	619.858			38.227	ug/L	40.118	
65 Cu	0.007965	26.493			113.901	ug/L	97.712	
75 As	0.588241	35.416			19400.652	ug/L	18642.973	
72 Ge-1					1089370.109	ug/L	1119200.829	
111 Cd	-0.011450	20.867			42.916	ug/L	65.287	
115 In-1					998966.414	ug/L	1016870.904	
50 Cr	0.248351	29.318			-94.237	ug/L	-156.160	
53 Cr	1.309216	24.482			35468.506	ug/L	35843.785	
61 Ni	4.969930	94.303			1960.286	ug/L	1817.529	
63 Cu	-0.004153	130.306			63.001	ug/L	72.334	
72 Ge					1089370.109	ug/L	1119200.829	
108 Cd	0.207788	11.924			37.384	ug/L	10.717	
114 Cd	0.005791	30.745			188.666	ug/L	166.491	
115 In					998966.414	ug/L	1016870.904	
106 Pd	-0.011966	57.735			8.333	ug/L	10.333	
83 Kr	-299.999698	457.383			425.010	ug/L	430.011	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	97.335
Cd	111	
In-1	115	98.239

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            97.335
	Cd	108
	Cd	114
>	In	115            98.239
	Pd	106
	Kr	83

SOP No. SAC-MT-0001

BJones

**Sample ID: CCV 7**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:42:38

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCV 7.052

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1327659.956	ug/L	1439060.121	
27 Al	4154.710865	1.549			18675450.395	ug/L	22018.336	
44 Ca	4665.841711	3.203			1344700.517	ug/L	13859.968	
52 Cr	97.065244	1.039			1010019.332	ug/L	33974.501	
55 Mn	96.186319	1.542			1430716.385	ug/L	1255.757	
59 Co	100.108111	1.258			1113046.743	ug/L	105.667	
60 Ni	99.630872	0.222			235893.291	ug/L	40.118	
65 Cu	100.029916	0.551			233533.758	ug/L	97.712	
75 As	102.791042	0.221			234960.486	ug/L	18642.973	
72 Ge-1					1074406.800	ug/L	1119200.829	
111 Cd	102.539441	0.792			184598.241	ug/L	65.287	
115 In-1					972646.594	ug/L	1016870.904	
50 Cr	97.262116	1.181			22233.000	ug/L	-156.160	
53 Cr	93.582110	3.035			75390.538	ug/L	35843.785	
61 Ni	103.631024	2.650			5638.418	ug/L	1817.529	
63 Cu	100.487231	0.522			174482.551	ug/L	72.334	
72 Ge					1074406.800	ug/L	1119200.829	
108 Cd	103.563333	0.517			13062.615	ug/L	10.717	
114 Cd	102.792999	0.912			431855.180	ug/L	166.491	
115 In					972646.594	ug/L	1016870.904	
106 Pd	103.247088	0.962			17267.021	ug/L	10.333	
83 Kr	759.997402	25.378			442.678	ug/L	430.011	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	95.998
Cd	111	
In-1	115	95.651

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72 95.998
	Cd	108
	Cd	114
>	In	115 95.651
	Pd	106
	Kr	83

BJones

**Sample ID: CCB 7**

Sample Description:

Batch ID:

Sample Date/Time: Wednesday, December 27, 2006 20:46:08

Method File: C:\elandata\Method\6360054.mth

Dataset File: C:\elandata\Dataset\061227C1\CCB 7.053

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1355780.540	ug/L		1439060.121
27 Al	-0.082178	118.583			21309.251	ug/L		22018.336
44 Ca	-5.118712	6.625			12156.107	ug/L		13859.968
52 Cr	-0.394315	7.947			29394.631	ug/L		33974.501
55 Mn	0.004005	97.736			1298.763	ug/L		1255.757
59 Co	0.006922	9.841			183.002	ug/L		105.667
60 Ni	0.011580	24.735			67.665	ug/L		40.118
65 Cu	0.012808	35.088			127.027	ug/L		97.712
75 As	0.591832	19.628			19647.092	ug/L		18642.973
72 Ge-1					1102607.148	ug/L		1119200.829
111 Cd	0.005896	54.310			73.640	ug/L		65.287
115 In-1					980274.410	ug/L		1016870.904
50 Cr	0.192077	30.854			-108.601	ug/L		-156.160
53 Cr	0.521466	180.216			35549.808	ug/L		35843.785
61 Ni	1.338497	113.961			1841.876	ug/L		1817.529
63 Cu	0.003349	213.470			77.334	ug/L		72.334
72 Ge					1102607.148	ug/L		1119200.829
108 Cd	0.016189	230.913			12.384	ug/L		10.717
114 Cd	0.010340	49.292			204.336	ug/L		166.491
115 In					980274.410	ug/L		1016870.904
106 Pd	0.003989	687.386			11.000	ug/L		10.333
83 Kr	-1179.996276	132.724			410.343	ug/L		430.011

**Internal Standard Recoveries**

Analyte	Mass	Int Std % Recovery
Sc	45	
Al	27	
Ca	44	
Cr	52	
Mn	55	
Co	59	
Ni	60	
Cu	65	
As	75	
Ge-1	72	98.517
Cd	111	
In-1	115	96.401

	Cr	50
	Cr	53
	Ni	61
	Cu	63
>	Ge	72            98.517
	Cd	108
	Cd	114
>	In	115            96.401
	Pd	106
	Kr	83

SEVERN  
TRENT

STL

STL Sacramento  
ICP-MS Data Review Checklist  
Level I and Level II

Instrument ID (Circle one): <b>M01</b> <b>M02</b>		Method 6020 SOP SAC-MT-0001		
File Number <b>061228A1</b>	Batch Numbers <b>6360054</b>	Date <b>12/28/06</b>	Analyst <b>BRJ</b>	
Lot Numbers <b>G6L200192, G6L200196, G6L200199</b>			YES	NO
			NA	
1. Copy of analysis protocol used included? <input checked="" type="checkbox"/> 2. ICVs & CCVs within 10% of true value or recal and rerun? <input checked="" type="checkbox"/> 3. ICB & CCBs < reporting limit or recal and rerun? <input checked="" type="checkbox"/> 4. 10 samples or less analyzed between calibration checks? <input checked="" type="checkbox"/> 5. All parameters within linear range? <input checked="" type="checkbox"/> 6. LCS/LCSD within limits? <input checked="" type="checkbox"/> 7. Prep blank value < reporting limit or all samples >20x blank? <input checked="" type="checkbox"/> 8. Internal standard intensities for samples (unless followed by dilution) are > 30% and <130% of the Calibration Blank intensities? <input checked="" type="checkbox"/> 9. Appropriate dilution factors applied to data? <input checked="" type="checkbox"/> 10. Matrix spike and spike dup within customer defined limits? <input checked="" type="checkbox"/> 11. Each batch checked for presence of internal standard in samples? <input checked="" type="checkbox"/> 12. Anomalies entered using Clouseau? <input checked="" type="checkbox"/>				

COMMENTS:

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REVIEWED BY: *MTZ*  
DATE: *11/9/07*

DATA ENTERED BY: *BRJ*  
DATE: *11/2/07*

# Dataset Report

Perkin Elmer ICPMS M01

SOP No. SAC-MT-0001

Method 6020

User Name: JonesB

Computer Name: SACP317A

Dataset File Path: C:\elandata\Dataset\061228A1\

Report Date/Time: Thursday, December 28, 2006 15:14:01

## The Dataset

Batch ID	Sample ID	Date and Time	Read Type	Description
	TUNE BJONES	10:53:16 Thu 28-Dec-06	Sample	
	AUTOLENS BJONES	10:56:04 Thu 28-Dec-06	Sample	Auto Lens Calib
	DAILY BJONES	11:00:39 Thu 28-Dec-06	Sample	
	Rinse 3X	11:13:00 Thu 28-Dec-06	Sample	
	Blank	11:16:09 Thu 28-Dec-06	Blank	
	Standard 1	11:19:13 Thu 28-Dec-06	Standard #1	
	ICV	11:22:00 Thu 28-Dec-06	Sample	
	ICB	11:24:53 Thu 28-Dec-06	Sample	
	LLSTD1	11:27:45 Thu 28-Dec-06	Sample	LL STD @ 10X
	LLSTD2	11:30:33 Thu 28-Dec-06	Sample	LL STD @ 5X
	ICSA	11:33:24 Thu 28-Dec-06	Sample	
	ICSAB	11:36:15 Thu 28-Dec-06	Sample	
	Rinse	11:39:07 Thu 28-Dec-06	Sample	
6360054	FB	11:42:01 Thu 28-Dec-06	Sample	G6L260000-54 BLK CTRL
	CCV 1 >RECAL	11:44:55 Thu 28-Dec-06	Sample	
	CCB 1	11:47:48 Thu 28-Dec-06	Sample	
	CCV 2	11:52:07 Thu 28-Dec-06	Sample	
	CCB 2	11:55:01 Thu 28-Dec-06	Sample	
6360054	JL4Q2B	11:57:55 Thu 28-Dec-06	Sample	G6L260000-54 BLK
6360054	JL4Q2C	12:00:46 Thu 28-Dec-06	Sample	G6L260000-54 LCS
6360054	JL4Q2L	12:03:34 Thu 28-Dec-06	Sample	G6L260000-54 LCSD
6360054	JLVQR	12:06:23 Thu 28-Dec-06	Sample	G6L200192-1
6360054	JLVQRP5	12:09:12 Thu 28-Dec-06	Sample	G6L200192-1 5X
6360054	JLVQRZ	12:12:03 Thu 28-Dec-06	Sample	G6L200192-1 PS
6360054	JLVQW	12:14:53 Thu 28-Dec-06	Sample	G6L200192-2
6360054	JLVQ1	12:17:43 Thu 28-Dec-06	Sample	G6L200192-3
6360054	JLVQ3	12:20:34 Thu 28-Dec-06	Sample	G6L200192-4
6360054	JLVQ4	12:23:25 Thu 28-Dec-06	Sample	G6L200192-5
	CCV 3	12:26:18 Thu 28-Dec-06	Sample	
	CCB 3	12:29:11 Thu 28-Dec-06	Sample	
	CCV 4	12:32:04 Thu 28-Dec-06	Sample	
	CCB 4	12:34:58 Thu 28-Dec-06	Sample	
6360054	JLVRA	12:37:49 Thu 28-Dec-06	Sample	G6L200196-1
6360054	JLVRF	12:40:37 Thu 28-Dec-06	Sample	G6L200196-2
6360054	JLVRL	12:43:26 Thu 28-Dec-06	Sample	G6L200196-3
6360054	JLVRN	12:46:16 Thu 28-Dec-06	Sample	G6L200196-4
6360054	JLVRQ	12:49:06 Thu 28-Dec-06	Sample	G6L200196-5
6360054	JLVVG	12:51:56 Thu 28-Dec-06	Sample	G6L200199-1
6360054	JLVJJ	12:54:46 Thu 28-Dec-06	Sample	G6L200199-2
6360054	JLVVK	12:57:37 Thu 28-Dec-06	Sample	G6L200199-3
6360054	JLVVL	13:00:28 Thu 28-Dec-06	Sample	G6L200199-4
6360054	JLVVM	13:03:20 Thu 28-Dec-06	Sample	G6L200199-5
	CCV 5	13:06:12 Thu 28-Dec-06	Sample	
	CCB 5	13:09:06 Thu 28-Dec-06	Sample	
	CCV 6	13:11:59 Thu 28-Dec-06	Sample	
	CCB 6	13:14:53 Thu 28-Dec-06	Sample	
	LLSTD1	13:17:44 Thu 28-Dec-06	Sample	LL STD @ 10X
	LLSTD2	13:20:33 Thu 28-Dec-06	Sample	LL STD @ 5X
	ICSA	13:23:22 Thu 28-Dec-06	Sample	

ICSAB	13:26:13 Thu 28-Dec-06	Sample
Rinse	13:29:05 Thu 28-Dec-06	Sample
CCV 7	13:31:59 Thu 28-Dec-06	Sample
CCB 7	13:34:53 Thu 28-Dec-06	Sample

## STL Sacramento

## RUN SUMMARY

Method: 6020 (SOP: SAC-MT-001)

Instrument: M01

Reported: 01/02/07 13:01:38

File ID: 061228A1

Analyst: jonesb

#	Sample ID	Lot No.	Batch	DF	Analyzed Date	Comment	Q
1	Rinse 3X			3.0	12/28/06 11:13		<input type="checkbox"/>
2	Blank			1.0	12/28/06 11:16		<input type="checkbox"/>
3	Standard1			1.0	12/28/06 11:19		<input type="checkbox"/>
4	ICV			1.0	12/28/06 11:22		<input type="checkbox"/>
5	ICB			1.0	12/28/06 11:24		<input type="checkbox"/>
6	LLSTD1			1.0	12/28/06 11:27		<input type="checkbox"/>
7	LLSTD2			1.0	12/28/06 11:30		<input type="checkbox"/>
8	ICSA			1.0	12/28/06 11:33		<input type="checkbox"/>
9	ICSA B			1.0	12/28/06 11:36		<input type="checkbox"/>
10	Rinse			1.0	12/28/06 11:39		<input type="checkbox"/>
11	FB			1.0	12/28/06 11:42		<input type="checkbox"/>
12	CCV 1			1.0	12/28/06 11:44		<input type="checkbox"/>
13	CCB 1			1.0	12/28/06 11:47		<input type="checkbox"/>
16	CCV 2			1.0	12/28/06 11:52		<input type="checkbox"/>
17	CCB 2			1.0	12/28/06 11:55		<input type="checkbox"/>
18	JL4Q2B	G6L260000	6360054	2A	1.0	12/28/06 11:57	<input type="checkbox"/>
19	JL4Q2C	G6L260000	6360054	2A	1.0	12/28/06 12:00	<input type="checkbox"/>
20	JL4Q2L	G6L260000	6360054	2A	1.0	12/28/06 12:03	<input type="checkbox"/>
21	JLVQR	G6L200192-1	6360054	2A	1.0	12/28/06 12:06	<input type="checkbox"/>
22	JLVQRP5	G6L200192	6360054		5.0	12/28/06 12:09	<input type="checkbox"/>
23	JLVQRZ	G6L200192-1	6360054		1.0	12/28/06 12:12	<input type="checkbox"/>
24	JLVQW	G6L200192-2	6360054	2A	1.0	12/28/06 12:14	<input type="checkbox"/>
25	JLVQ1	G6L200192-3	6360054	2A	1.0	12/28/06 12:17	<input type="checkbox"/>
26	JLVQ3	G6L200192-4	6360054	2A	1.0	12/28/06 12:20	<input type="checkbox"/>
27	JLVQ4	G6L200192-5	6360054	2A	1.0	12/28/06 12:23	<input type="checkbox"/>
28	CCV 3				1.0	12/28/06 12:26	<input type="checkbox"/>
29	CCB 3				1.0	12/28/06 12:29	<input type="checkbox"/>
30	CCV 4				1.0	12/28/06 12:32	<input type="checkbox"/>
31	CCB 4				1.0	12/28/06 12:34	<input type="checkbox"/>
32	JLVRA	G6L200196-1	6360054	2A	1.0	12/28/06 12:37	<input type="checkbox"/>
33	JLVRF	G6L200196-2	6360054	2A	1.0	12/28/06 12:40	<input type="checkbox"/>
34	JLVR L	G6L200196-3	6360054	2A	1.0	12/28/06 12:43	<input type="checkbox"/>
35	JLVRN	G6L200196-4	6360054	2A	1.0	12/28/06 12:46	<input type="checkbox"/>
36	JLVRQ	G6L200196-5	6360054	2A	1.0	12/28/06 12:49	<input type="checkbox"/>
37	JLVVG	G6L200199-1	6360054	2A	1.0	12/28/06 12:51	<input type="checkbox"/>
38	JLVVJ	G6L200199-2	6360054	2A	1.0	12/28/06 12:54	<input type="checkbox"/>
39	JL VVK	G6L200199-3	6360054	2A	1.0	12/28/06 12:57	<input type="checkbox"/>
40	JL VVL	G6L200199-4	6360054	2A	1.0	12/28/06 13:00	<input type="checkbox"/>
41	JL VVM	G6L200199-5	6360054	2A	1.0	12/28/06 13:03	<input type="checkbox"/>
42	CCV 5				1.0	12/28/06 13:06	<input type="checkbox"/>
43	CCB 5				1.0	12/28/06 13:09	<input type="checkbox"/>
44	CCV 6				1.0	12/28/06 13:11	<input type="checkbox"/>
45	CCB 6				1.0	12/28/06 13:14	<input type="checkbox"/>
46	LLSTD1				1.0	12/28/06 13:17	<input type="checkbox"/>
47	LLSTD2				1.0	12/28/06 13:20	<input type="checkbox"/>
48	ICSA				1.0	12/28/06 13:23	<input type="checkbox"/>

## STL Sacramento

## RUN SUMMARY

Method: 6020 (SOP: SAC-MT-001)

Instrument: M01

Reported: 01/02/07 13:01:38

File ID: 061228A1

Analyst: jonesb

#	Sample ID	Lot No.	Batch	DF	Analyzed Date	Comment	Q
49	ICSAB			1.0	12/28/06 13:26		<input type="checkbox"/>
50	Rinse			1.0	12/28/06 13:29		<input type="checkbox"/>
51	CCV 7			1.0	12/28/06 13:31		<input type="checkbox"/>
52	CCB 7			1.0	12/28/06 13:34		<input type="checkbox"/>

## STL Sacramento

## INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001)

M01 (M01)

Reported: 01/02/07 13:01:38

File ID: 061228A1

Analyst: jonesb

Germanium

#	Sample ID	Analyzed Date	Q
1	Rinse 3X	12/28/06 11:13	99.4 <input type="checkbox"/>
2	Blank	12/28/06 11:16	100.0 <input checked="" type="checkbox"/>
3	Standard1	12/28/06 11:19	101.9 <input checked="" type="checkbox"/>
4	ICV	12/28/06 11:22	102.2 <input checked="" type="checkbox"/>
5	ICB	12/28/06 11:24	101.7 <input checked="" type="checkbox"/>
6	LLSTD1	12/28/06 11:27	101.6 <input checked="" type="checkbox"/>
7	LLSTD2	12/28/06 11:30	101.6 <input checked="" type="checkbox"/>
8	ICSA	12/28/06 11:33	87.4 <input checked="" type="checkbox"/>
9	ICSAB	12/28/06 11:36	87.9 <input checked="" type="checkbox"/>
10	Rinse	12/28/06 11:39	104.3 <input checked="" type="checkbox"/>
11	FB	12/28/06 11:42	104.9 <input checked="" type="checkbox"/>
12	CCV 1	12/28/06 11:44	101.7 <input checked="" type="checkbox"/>
13	CCB 1	12/28/06 11:47	102.2 <input checked="" type="checkbox"/>
16	CCV 2	12/28/06 11:52	99.1 <input checked="" type="checkbox"/>
17	CCB 2	12/28/06 11:55	100.2 <input checked="" type="checkbox"/>
18	JL4Q2B	12/28/06 11:57	99.8 <input checked="" type="checkbox"/>
19	JL4Q2C	12/28/06 12:00	94.4 <input checked="" type="checkbox"/>
20	JL4Q2L	12/28/06 12:03	94.7 <input checked="" type="checkbox"/>
21	JLVQR	12/28/06 12:06	94.5 <input checked="" type="checkbox"/>
22	JLVQRP5	12/28/06 12:09	96.1 <input type="checkbox"/>
23	JLVQRZ	12/28/06 12:12	95.7 <input checked="" type="checkbox"/>
24	JLVQW	12/28/06 12:14	95.7 <input checked="" type="checkbox"/>
25	JLVQ1	12/28/06 12:17	95.4 <input checked="" type="checkbox"/>
26	JLVQ3	12/28/06 12:20	96.8 <input checked="" type="checkbox"/>
27	JLVQ4	12/28/06 12:23	98.3 <input checked="" type="checkbox"/>
28	CCV 3	12/28/06 12:26	99.3 <input checked="" type="checkbox"/>
29	CCB 3	12/28/06 12:29	99.3 <input checked="" type="checkbox"/>
30	CCV 4	12/28/06 12:32	98.6 <input checked="" type="checkbox"/>
31	CCB 4	12/28/06 12:34	99.0 <input checked="" type="checkbox"/>
32	JLVRA	12/28/06 12:37	98.3 <input checked="" type="checkbox"/>
33	JLVRF	12/28/06 12:40	97.6 <input checked="" type="checkbox"/>
34	JLVRL	12/28/06 12:43	98.5 <input checked="" type="checkbox"/>
35	JLVRN	12/28/06 12:46	98.7 <input checked="" type="checkbox"/>
36	JLVRQ	12/28/06 12:49	99.2 <input checked="" type="checkbox"/>
37	JLVVG	12/28/06 12:51	99.1 <input checked="" type="checkbox"/>
38	JLVVJ	12/28/06 12:54	98.6 <input checked="" type="checkbox"/>
39	JLVVK	12/28/06 12:57	98.5 <input checked="" type="checkbox"/>
40	JLVLV	12/28/06 13:00	97.7 <input checked="" type="checkbox"/>
41	JLVVM	12/28/06 13:03	97.2 <input checked="" type="checkbox"/>
42	CCV 5	12/28/06 13:06	96.3 <input checked="" type="checkbox"/>
43	CCB 5	12/28/06 13:09	96.7 <input checked="" type="checkbox"/>
44	CCV 6	12/28/06 13:11	96.6 <input checked="" type="checkbox"/>
45	CCB 6	12/28/06 13:14	96.7 <input checked="" type="checkbox"/>
46	LLSTD1	12/28/06 13:17	97.6 <input checked="" type="checkbox"/>
47	LLSTD2	12/28/06 13:20	97.7 <input checked="" type="checkbox"/>
48	ICSA	12/28/06 13:23	85.7 <input checked="" type="checkbox"/>

STL Sacramento

## INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001)

M01 (M01)

Reported: 01/02/07 13:01:38

File ID: 061228A1

Analyst: jonesb

Germanium

#	Sample ID	Analyzed Date		Q
49	ICSAB	12/28/06 13:26	86.4	<input checked="" type="checkbox"/>
50	Rinse	12/28/06 13:29	101.4	<input checked="" type="checkbox"/>
51	CCV 7	12/28/06 13:31	99.2	<input checked="" type="checkbox"/>
52	CCB 7	12/28/06 13:34	99.3	<input checked="" type="checkbox"/>

# STL SACRAMENTO - Elan 6000 ICPMS Perkin Elmer M01 Quantitative Method Report

File Name: 6360054R.mth  
File Path: C:\elandata\Method\6360054R.mth

## Timing Parameters

Sweeps/Reading: 50  
Readings/Replicate: 1  
Number of Replicates: 3  
Tuning File: default.tun  
Optimization File: default.dac  
QC Enabled: Yes  
Settling Time: Normal

Analyte	Mass	Scan Mode	MCA Channels	Dwell Time	Integration Time
Sc	44.956	Peak Hopping	1	14.0 ms	700 ms
Al	26.982	Peak Hopping	1	14.0 ms	700 ms
Ca	43.956	Peak Hopping	1	14.0 ms	700 ms
Cr	51.941	Peak Hopping	1	14.0 ms	700 ms
Cu	64.928	Peak Hopping	1	14.0 ms	700 ms
Ge-1	71.922	Peak Hopping	1	14.0 ms	700 ms
Cr	49.946	Peak Hopping	1	5.0 ms	250 ms
Cr	52.941	Peak Hopping	1	5.0 ms	250 ms
Cu	62.930	Peak Hopping	1	5.0 ms	250 ms
Ge	71.922	Peak Hopping	1	14.0 ms	700 ms
Pd	105.903	Peak Hopping	1	14.0 ms	700 ms
Kr	82.914	Peak Hopping	1	14.0 ms	700 ms

## Signal Processing

Detector Mode: Dual  
Measurement Units: Counts  
AutoLens: On  
Spectral Peak Processing: Average  
Signal Profile Processing: Average  
Blank Subtraction: After Internal Standard  
Baseline Readings: 0  
Smoothing: Yes, Factor 5

## Equations

Analyte	Mass	Corrections
Cu	64.928	-0.0078 * Ti 49
Cr	49.946	- 0.739726 * Ti 47 - 0.002506 * V 51

## Calibration Information

Analyte	Mass	Curve Type	Sample Units	Std Units	Std 1	Std 2	Std 3	Std 4
Sc	44.956	Linear Thru Zero	ug/L	ug/L				
Al	26.982	Linear Thru Zero	ug/L	ug/L	5.1e+003			
Ca	43.956	Linear Thru Zero	ug/L	ug/L	5.1e+003			
Cr	51.941	Linear Thru Zero	ug/L	ug/L	100			
Cu	64.928	Linear Thru Zero	ug/L	ug/L	100			
Ge-1	71.922	Linear Thru Zero	ug/L	ug/L				
Cr	49.946	Linear Thru Zero	ug/L	ug/L	100			
Cr	52.941	Linear Thru Zero	ug/L	ug/L	100			

Cu	62.930	Linear Thru Zero	ug/L	ug/L	100
Ge	71.922	Linear Thru Zero	ug/L	ug/L	
Pd	105.903	Linear Thru Zero	ug/L	ug/L	100
Kr	82.914	Linear Thru Zero	ug/L	ug/L	100

**STL SACRAMENTO - Perkin Elmer Elan 6000 ICPMS, M01 – Methods 6020, 200.8**

**AIR TOX STANDARDS - 4 % HNO<sub>3</sub>, 0.5 % HCl**

**Standards for run:**

Tuning standard: 2830-29D

Internal standard: 2830-30B

Blank, CCBs: 2531-37E

Standard 1, CCVs: 2830-29C

ICV: 2830-18D

ICSA: 2830-30A

ICSAB: 2830-28E

File Number: 061228A1

## Instrument Tuning Report - Elan 6000

File Name: default.tun

### Sample Information

Sample Date/Time: Thursday, December 28, 2006 10:53:16

Sample ID: TUNE BJONES

Analyte	Exact Mass	Meas. Mass	Mass DAC	Meas. Pk. Width	Res. DAC	Custom Res.
Li	7.016	7.027	1565	0.746	2032	
Be	9.012	9.079	2055	0.756	2030	
Co	58.933	58.978	14301	0.736	1892	
In	114.904	114.929	27949	0.738	1852	
Ce	139.905	139.928	34031	0.735	1897	
Tl	204.975	204.979	49734	0.719	2120	
Pb	207.977	207.979	50476	0.718	2139	
U	238.050	238.076	57686	0.712	2303	

## Elan 6000 Instrument Optomization Report

File Name c:\elandata\Optimize\default.dac

Path c:\elandata\Optimize

### Sample Information

Sample Date/Time: Thursday, December 28, 2006 10:53:16

Sample ID: TUNE BJONES

### Parameter Settings

Nebulizer Gas Flow	0.9
Lens Voltage	6.5
ICP RF Power	1100.0
Analog Stage Voltage	-2100.0
Pulse Stage Voltage	1450.0
Discriminator Threshold	70.0
AC Rod Offset	-7.0
Service DAC 1	60.0
Quadrupole Rod Offset	0.0

### AutoLens Calibration

Date: 10:56:04 Thu 28-Dec-06  
 Sample Filename: AUTOLENS BJONES.002  
 Dataset Pathname: 061228A1\

Lens Voltage Start: 3.50 V  
 Lens Voltage End: 8.50 V  
 Lens Voltage Step: 0.25 V  
 Slope: 0.0283  
 Intercept: 4.7751

Analyte	Mass	Optimum Voltage	Maximum Intensity	# Points
Be	9.012	5.0 V	5439 cps	21
Co	58.933	6.5 V	203177 cps	21
In	114.904	8.0 V	390973 cps	21

### Dual Detector Calibration

Date: 15:27:19 Tue 26-Dec-06  
 Sample Filename: DUAL BJONES.790  
 Dataset Pathname: c:\elandata\Dataset\dual detector calibration\

Points Acquired: 37  
 Lens Voltage Start: -3.00 V  
 Lens Voltage End: 15.00 V  
 Lens Voltage Step: 0.50 V

Analyte	Mass	Gain	N(max)
Li	6.016	7668	1.63e+009 cps
Li	7.014	7031	1.78e+009 cps
Be	9.014	6641	1.89e+009 cps
B	11.008	6908	1.81e+009 cps
Na	22.989	6977	1.79e+009 cps

Report Date/Time: Thursday, December 28, 2006 15:18:21

STL SACRAMENTO - Elan 6000 ICPMS, M01 - Methods 6020, 200.8

Mg	23.984	6554 1.91e+009 cps
Mg	24.987	6268 2.00e+009 cps
Al	26.980	6050 2.07e+009 cps
P	30.996	5500 2.28e+009 cps
K	38.965	5320 2.35e+009 cps
Ca	42.960	cps
Ca	43.955	5331 2.35e+009 cps
Sc	44.958	5317 2.35e+009 cps
V	50.942	5183 2.42e+009 cps
Cr	51.941	5026 2.49e+009 cps
Fe	53.938	4925 2.54e+009 cps
Mn	54.937	4884 2.56e+009 cps
Fe	56.935	4704 2.66e+009 cps
Co	58.934	4679 2.68e+009 cps
Ni	59.933	4577 2.74e+009 cps
Cu	62.931	4443 2.82e+009 cps
Cu	64.929	4415 2.84e+009 cps
Zn	67.926	4449 2.81e+009 cps
Ge	71.923	4537 2.76e+009 cps
As	74.920	4391 2.85e+009 cps
Se	77.917	4584 2.73e+009 cps
Br	78.916	cps
Se	81.918	4418 2.83e+009 cps
Sr	87.905	4471 2.80e+009 cps
Mo	96.905	4519 2.77e+009 cps
Ag	106.904	4067 3.08e+009 cps
Ag	108.907	4089 3.06e+009 cps
Cd	110.905	4109 3.05e+009 cps
Cd	113.902	4163 3.01e+009 cps
In	114.903	4196 2.98e+009 cps
Sn	117.903	4237 2.95e+009 cps
Sb	120.903	4117 3.04e+009 cps
Ba	134.905	4043 3.10e+009 cps
Tm	168.936	4015 3.12e+009 cps
Tl	204.976	3743 3.34e+009 cps
Pb	207.978	3760 3.33e+009 cps
Bi	208.981	cps
U	238.051	3764 3.33e+009 cps

## Daily Performance Report - Elan 6000

Sample ID: DAILY BJONES

Sample Date/Time: Thursday, December 28, 2006 11:00:39

Sample Description:

Sample File: C:\elandata\Sample\6360054X.sam

Method File: C:\elandata\Method\000-DAILY\_EPA.mth

Dataset File: C:\elandata\Dataset\061228A1\DJAILY BJONES.003

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Number of Replicates: 5

Dual Detector Mode: Dual

### Summary

Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
Mg	24	35946.769	644.077	1.792
Rh	103	249717.169	1425.720	0.571
Pb	208	185018.891	2779.842	1.502
[> Ba	138	282493.935	2518.495	0.892
[ Ba++	69	0.021	0.000	2.047
[> Ce	140	347897.059	2619.499	0.753
[ CeO	156	0.032	0.002	4.723
Bkgd	220	2.857	2.259	79.057
Li	7	4733.468	171.875	3.631
Be	9	1888.429	68.948	3.651
Co	59	132107.912	1300.244	0.984
In	115	334395.523	2557.730	0.765
Tl	205	257608.471	2553.007	0.991

BJones

**Sample ID: Rinse 3X**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:13:00

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\Rinse 3X.004

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 6

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1504651.167	ug/L	0.000
27 Al			26089.505	ug/L	0.000
44 Ca			22804.347	ug/L	0.000
52 Cr			31510.318	ug/L	0.000
65 Cu			108.278	ug/L	0.000
72 Ge-1			1200321.758	ug/L	0.000
50 Cr			-186.013	ug/L	0.000
53 Cr			41991.927	ug/L	0.000
63 Cu			77.334	ug/L	0.000
72 Ge			1200321.758	ug/L	0.000
106 Pd			10.333	ug/L	0.000
83 Kr			467.679	ug/L	0.000

### Internal Standard Recoveries

Analyte Mass	Int Std % Recovery
--------------	--------------------

Sc	45
Al	27
Ca	44
Cr	52
Cu	65
Ge-1	72
Cr	50
Cr	53
Cu	63
Ge	72
Pd	106
Kr	83

BJones

**Sample ID:** Blank

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:16:09

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\Blank.005

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1496931.674	ug/L	
27 Al			27524.892	ug/L	
44 Ca			21566.213	ug/L	
52 Cr			31414.304	ug/L	
65 Cu			122.887	ug/L	
72 Ge-1			1207950.014	ug/L	
50 Cr			-148.886	ug/L	
53 Cr			40927.686	ug/L	
63 Cu			80.668	ug/L	
72 Ge			1207950.014	ug/L	
106 Pd			15.333	ug/L	
83 Kr			506.348	ug/L	

### Internal Standard Recoveries

Analyte Mass	Int Std % Recovery
Sc 45	
Al 27	
Ca 44	
Cr 52	
Cu 65	
Ge-1 72	
Cr 50	
Cr 53	
Cu 63	
Ge 72	
Pd 106	
Kr 83	

SOP No. SAC-MT-0001

BJones

**Sample ID: Standard 1**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:19:13

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\Standard 1.006

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1536074.837	ug/L	1496931.674
27 Al	5100.000000	1.180	31250572.455	ug/L	27524.892
44 Ca	5100.000000	0.264	1655303.657	ug/L	21566.213
52 Cr	100.000000	0.466	1158885.968	ug/L	31414.304
65 Cu	100.000000	0.900	271500.851	ug/L	122.887
72 Ge-1			1230812.437	ug/L	1207950.014
50 Cr	100.000000	3.400	27359.098	ug/L	-148.886
53 Cr	100.000000	2.384	93667.868	ug/L	40927.686
63 Cu	100.000000	0.839	206544.820	ug/L	80.668
72 Ge			1230812.437	ug/L	1207950.014
106 Pd	100.000000	0.523	19945.708	ug/L	15.333
83 Kr	100.000000	8162.060	506.681	ug/L	506.348

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	
Cr	50	
Cr	53	
Cu	63	
Ge	72	
Pd	106	
Kr	83	

BJones

**Sample ID: ICV**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:22:00

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\ICV .007

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 3

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1547099.180	ug/L	1496931.674
27 Al	846.067069	4.040	5220433.331	ug/L	27524.892
44 Ca	938.034482	4.510	323115.574	ug/L	21566.213
52 Cr	82.174804	4.067	960211.483	ug/L	31414.304
65 Cu	84.140429	3.785	229030.465	ug/L	122.887
72 Ge-1			1234990.050	ug/L	1207950.014
50 Cr	69.489540	3.457	19014.415	ug/L	-148.886
53 Cr	78.920919	5.845	82932.303	ug/L	40927.686
63 Cu	83.292136	3.536	172462.843	ug/L	80.668
72 Ge			1234990.050	ug/L	1207950.014
106 Pd	80.111807	0.927	15981.916	ug/L	15.333
83 Kr	2399.809050	245.055	514.348	ug/L	506.348

### Internal Standard Recoveries

Analyte Mass	Int Std % Recovery
--------------	--------------------

Sc	45
Al	27
Ca	44
Cr	52
Cu	65
Ge-1	72 102.239
Cr	50
Cr	53
Cu	63
Ge	72 102.239
Pd	106
Kr	83

BJones

**Sample ID: ICB**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:24:53

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\ICB.008

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1550115.852	ug/L	1496931.674
27 Al	0.134298	25.831	28809.017	ug/L	27524.892
44 Ca	4.920671	38.214	23503.207	ug/L	21566.213
52 Cr	0.254251	11.890	34801.740	ug/L	31414.304
65 Cu	0.002013	565.629	130.521	ug/L	122.887
72 Ge-1			1228313.128	ug/L	1207950.014
50 Cr	-0.012748	496.516	-154.982	ug/L	-148.886
53 Cr	-0.597035	192.153	41311.017	ug/L	40927.686
63 Cu	-0.000363	1479.910	81.334	ug/L	80.668
72 Ge			1228313.128	ug/L	1207950.014
106 Pd	-0.010035	332.917	13.333	ug/L	15.333
83 Kr	-7099.409242	42.744	482.680	ug/L	506.348

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	101.686
Cr	50	
Cr	53	
Cu	63	
Ge	72	101.686
Pd	106	
Kr	83	

BJones

**Sample ID: LLSTD1**

Sample Description: LL STD @ 10X

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:27:45

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\LLSTD1.009

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 83

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1536884.188	ug/L	1496931.674
27 Al	61.705673	1.240	404831.685	ug/L	27524.892
44 Ca	67.676437	1.394	43538.724	ug/L	21566.213
52 Cr	1.217686	1.303	45616.943	ug/L	31414.304
65 Cu	1.078341	1.400	3043.955	ug/L	122.887
72 Ge-1			1227727.428	ug/L	1207950.014
50 Cr	1.490057	1.248	257.630	ug/L	-148.886
53 Cr	-5.924799	32.944	38531.270	ug/L	40927.686
63 Cu	1.071926	3.587	2289.172	ug/L	80.668
72 Ge			1227727.428	ug/L	1207950.014
106 Pd	0.886430	9.318	192.002	ug/L	15.333
83 Kr	-3999.668806	86.494	493.014	ug/L	506.348

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	101.637
Cr	50	
Cr	53	
Cu	63	
Ge	72	101.637
Pd	106	
Kr	83	

BJones

**Sample ID: LLSTD2**

Sample Description: LL STD @ 5X

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:30:33

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\LLSTD2.010

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 84

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1538490.627	ug/L	1496931.674
27 Al	120.076966	1.085	761361.136	ug/L	27524.892
44 Ca	120.755341	1.692	60499.778	ug/L	21566.213
52 Cr	2.147136	2.163	56069.083	ug/L	31414.304
65 Cu	2.109543	1.366	5836.197	ug/L	122.887
72 Ge-1			1227821.361	ug/L	1207950.014
50 Cr	3.224714	5.814	733.789	ug/L	-148.886
53 Cr	-10.714243	4.517	36046.037	ug/L	40927.686
63 Cu	2.124693	1.255	4458.178	ug/L	80.668
72 Ge			1227821.361	ug/L	1207950.014
106 Pd	1.955187	6.132	405.009	ug/L	15.333
83 Kr	-7299.390397	67.902	482.013	ug/L	506.348

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	101.645
Cr	50	
Cr	53	
Cu	63	
Ge	72	101.645
Pd	106	
Kr	83	

BJones

**Sample ID: ICSA**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:33:24

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\ICSA.011

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 2

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1331517.994	ug/L	1496931.674
27 Al	102314.694541	0.506	537225590.213	ug/L	27524.892
44 Ca	101314.441253	0.693	27844398.593	ug/L	21566.213
52 Cr	1.987598	1.785	46657.066	ug/L	31414.304
65 Cu	0.377729	4.420	986.487	ug/L	122.887
72 Ge-1			1055488.544	ug/L	1207950.014
50 Cr	135.991477	7.826	31958.719	ug/L	-148.886
53 Cr	6.783745	7.691	38785.207	ug/L	40927.686
63 Cu	5.258484	0.531	9381.060	ug/L	80.668
72 Ge			1055488.544	ug/L	1207950.014
106 Pd	0.545236	3.188	124.001	ug/L	15.333
83 Kr	85994.398313	14.071	793.036	ug/L	506.348

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	87.378
Cr	50	
Cr	53	
Cu	63	
Ge	72	87.378
Pd	106	
Kr	83	

BJones

**Sample ID: ICSAB**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:36:15

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\ICSAB.012

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 1

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1335815.619	ug/L	1496931.674	
27 Al	104006.719646	1.051	549529785.321		ug/L	27524.892		
44 Ca	103470.372917	0.717	28614625.263		ug/L	21566.213		
52 Cr	105.363897	0.426	1052245.474		ug/L	31414.304		
65 Cu	91.643730	1.154	214731.688		ug/L	122.887		
72 Ge-1			1062137.577		ug/L	1207950.014		
50 Cr	203.767705	5.063	48244.532		ug/L	-148.886		
53 Cr	87.003522	2.856	75001.753		ug/L	40927.686		
63 Cu	95.295114	0.708	169858.665		ug/L	80.668		
72 Ge			1062137.577		ug/L	1207950.014		
106 Pd	81.509237	1.194	16260.429		ug/L	15.333		
83 Kr	87594.305473	6.091	798.370		ug/L	506.348		

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	87.929
Cr	50	
Cr	53	
Cu	63	
Ge	72	87.929
Pd	106	
Kr	83	

BJones

**Sample ID: Rinse**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:39:07

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\Rinse.013

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 6

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1569399.256	ug/L	1496931.674	
27 Al	2.378878	5.402			43628.176	ug/L	27524.892	
44 Ca	7.699496	6.817			25025.069	ug/L	21566.213	
52 Cr	0.417909	9.568			37598.286	ug/L	31414.304	
65 Cu	0.007590	12.284			149.295	ug/L	122.887	
72 Ge-1					1260276.696	ug/L	1207950.014	
50 Cr	0.014025	188.383			-151.391	ug/L	-148.886	
53 Cr	2.112333	49.855			43824.866	ug/L	40927.686	
63 Cu	0.005292	144.625			95.335	ug/L	80.668	
72 Ge					1260276.696	ug/L	1207950.014	
106 Pd	-0.023415	118.019			10.667	ug/L	15.333	
83 Kr	-11699.016154	32.467			467.346	ug/L	506.348	

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	104.332
Cr	50	
Cr	53	
Cu	63	
Ge	72	104.332
Pd	106	
Kr	83	

BJones

**Sample ID: FB**

Sample Description: G6L260000-54 BLK CTRL

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 11:42:01

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\FB.014

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 19

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1582502.160	ug/L	1496931.674
27 Al	31.203558	1.183	225470.036	ug/L	27524.892
44 Ca	354.161793	1.005	139343.095	ug/L	21566.213
52 Cr	1.081046	3.754	45481.924	ug/L	31414.304
65 Cu	0.591741	2.310	1781.906	ug/L	122.887
72 Ge-1			1266739.266	ug/L	1207950.014
50 Cr	1.272003	7.669	204.089	ug/L	-148.886
53 Cr	-43.151164	3.243	19840.188	ug/L	40927.686
63 Cu	0.598787	1.196	1356.961	ug/L	80.668
72 Ge			1266739.266	ug/L	1207950.014
106 Pd	1.343032	7.098	283.005	ug/L	15.333
83 Kr	-8799.261615	69.197	477.013	ug/L	506.348

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	104.867
Cr	50	
Cr	53	
Cu	63	
Ge	72	104.867
Pd	106	
Kr	83	

BJones

**Sample ID: CCV 1**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:44:55

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCV 1.015

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc.	Mean	Conc. RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc				1548448.099	ug/L	1496931.674	
27 Al	5583.394176		1.145	34162110.046	ug/L	27524.892	
44 Ca	5377.853071		0.465	1741870.990	ug/L	21566.213	
52 Cr	102.336180		1.465	1183521.649	ug/L	31414.304	
65 Cu	100.496719		1.006	272492.810	ug/L	122.887	
72 Ge-1				1229058.276	ug/L	1207950.014	
50 Cr	96.194495		0.599	26278.997	ug/L	-148.886	
53 Cr	93.439304		2.100	90127.911	ug/L	40927.686	
63 Cu	98.921986		0.964	204022.317	ug/L	80.668	
72 Ge				1229058.276	ug/L	1207950.014	
106 Pd	92.494163		1.369	18449.766	ug/L	15.333	
83 Kr	-8099.324869		33.196	479.346	ug/L	506.348	

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	101.747
Cr	50	
Cr	53	
Cu	63	
Ge	72	101.747
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: CCB 1**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:47:48

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCB 1.016

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1560668.074	ug/L	1496931.674
27 Al	0.701341	11.082	32420.959	ug/L	27524.892
44 Ca	5.853922	10.333	23909.959	ug/L	21566.213
52 Cr	0.348467	5.347	36026.683	ug/L	31414.304
65 Cu	-0.001888	430.453	120.321	ug/L	122.887
72 Ge-1			1233935.303	ug/L	1207950.014
50 Cr	-0.053205	117.831	-166.719	ug/L	-148.886
53 Cr	0.828280	73.552	42239.566	ug/L	40927.686
63 Cu	0.001266	254.624	85.001	ug/L	80.668
72 Ge			1233935.303	ug/L	1207950.014
106 Pd	-0.028432	66.811	9.667	ug/L	15.333
83 Kr	-19598.316442	42.445	441.011	ug/L	506.348

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	102.151
Cr	50	
Cr	53	
Cu	63	
Ge	72	102.151
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: BLK RECAL**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:47:48

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCB 1.016

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1560668.074	ug/L		
27 Al					32420.959	ug/L		
44 Ca					23909.959	ug/L		
52 Cr					36026.683	ug/L		
65 Cu					120.321	ug/L		
72 Ge-1					1233935.303	ug/L		
50 Cr					-166.719	ug/L		
53 Cr					42239.566	ug/L		
63 Cu					85.001	ug/L		
72 Ge					1233935.303	ug/L		
106 Pd					9.667	ug/L		
83 Kr					441.011	ug/L		

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	
Cr	50	
Cr	53	
Cu	63	
Ge	72	
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: STD1 RECAL**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:44:55

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCV 1.015

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1548448.099	ug/L	1560668.074
27 Al	5100.000000	1.145	34162110.046	ug/L	32420.959
44 Ca	5100.000000	0.465	1741870.990	ug/L	23909.959
52 Cr	100.000000	1.470	1183521.649	ug/L	36026.683
65 Cu	100.000000	1.005	272492.810	ug/L	120.321
72 Ge-1			1229058.276	ug/L	1233935.303
50 Cr	100.000000	0.598	26278.997	ug/L	-166.719
53 Cr	100.000000	2.119	90127.911	ug/L	42239.566
63 Cu	100.000000	0.964	204022.317	ug/L	85.001
72 Ge			1229058.276	ug/L	1233935.303
106 Pd	100.000000	1.369	18449.766	ug/L	9.667
83 Kr	100.000000	23.382	479.346	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45
Al	27
Ca	44
Cr	52
Cu	65
Ge-1	72
Cr	50
Cr	53
Cu	63
Ge	72
Pd	106
Kr	83

**Sample ID: CCV 2**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:52:07

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCV 2.017

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1549147.084	ug/L	1560668.074
27 Al	5192.459552	0.643	34602186.091	ug/L	32420.959
44 Ca	5171.342409	0.531	1756712.676	ug/L	23909.959
52 Cr	100.555697	0.442	1133750.229	ug/L	36026.683
65 Cu	100.696017	0.560	272958.502	ug/L	120.321
72 Ge-1			1222721.476	ug/L	1233935.303
50 Cr	102.933964	2.651	26919.105	ug/L	-166.719
53 Cr	101.191527	2.135	90242.155	ug/L	42239.566
63 Cu	100.883125	1.427	204744.511	ug/L	85.001
72 Ge			1222721.476	ug/L	1233935.303
106 Pd	98.407758	1.939	18156.155	ug/L	9.667
83 Kr	110.434864	56.709	483.347	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	99.091
Cr	50	
Cr	53	
Cu	63	
Ge	72	99.091
Pd	106	
Kr	83	

BJones

**Sample ID: CCB 2**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 11:55:01

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCB 2.018

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1577872.917	ug/L	1560668.074
27 Al	0.090885	15.082	33082.093	ug/L	32420.959
44 Ca	1.161371	192.376	24338.154	ug/L	23909.959
52 Cr	0.010506	323.553	36201.070	ug/L	36026.683
65 Cu	-0.000409	1003.185	119.471	ug/L	120.321
72 Ge-1			1235827.273	ug/L	1233935.303
50 Cr	0.079053	91.925	-146.105	ug/L	-166.719
53 Cr	-0.646980	215.745	41995.420	ug/L	42239.566
63 Cu	0.000149	4131.402	85.335	ug/L	85.001
72 Ge			1235827.273	ug/L	1233935.303
106 Pd	0.005423	493.288	10.667	ug/L	9.667
83 Kr	22.608619	174.736	449.678	ug/L	441.011

### Internal Standard Recoveries

Analyte Mass	Int Std % Recovery
--------------	--------------------

Sc	45
Al	27
Ca	44
Cr	52
Cu	65
Ge-1	72 100.153
Cr	50
Cr	53
Cu	63
Ge	72 100.153
Pd	106
Kr	83

BJones

**Sample ID: JL4Q2B**

Sample Description: G6L260000-54 BLK

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 11:57:55

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JL4Q2B.019

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 20

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1600387.593	ug/L	1560668.074
27 Al	2.903099	2.651	51816.978	ug/L	32420.959
44 Ca	129.305993	1.281	67499.361	ug/L	23909.959
52 Cr	-0.637793	6.956	28618.403	ug/L	36026.683
65 Cu	0.350798	1.599	1077.273	ug/L	120.321
72 Ge-1			1231356.422	ug/L	1233935.303
50 Cr	0.831004	20.676	53.764	ug/L	-166.719
53 Cr	-49.369906	3.824	18378.640	ug/L	42239.566
63 Cu	0.352502	4.828	805.104	ug/L	85.001
72 Ge			1231356.422	ug/L	1233935.303
106 Pd	0.018077	30.000	13.000	ug/L	9.667
83 Kr	-34.782402	339.606	427.677	ug/L	441.011

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	99.791
Cr	50	
Cr	53	
Cu	63	
Ge	72	99.791
Pd	106	
Kr	83	

BJones

**Sample ID: JL4Q2C**

Sample Description: G6L260000-54 LCS

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 12:00:46

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JL4Q2C.020

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 101

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1494779.536	ug/L	1560668.074
27 Al	1004.261859	4.707	6394585.576	ug/L	32420.959
44 Ca	1329.211062	5.017	446508.908	ug/L	23909.959
52 Cr	183.482637	4.608	2027897.095	ug/L	36026.683
65 Cu	198.946164	4.035	513219.225	ug/L	120.321
72 Ge-1			1164642.236	ug/L	1233935.303
50 Cr	183.334608	4.834	45750.166	ug/L	-166.719
53 Cr	155.676140	6.663	110684.436	ug/L	42239.566
63 Cu	194.190561	4.748	375075.721	ug/L	85.001
72 Ge			1164642.236	ug/L	1233935.303
106 Pd	184.369780	1.691	34007.638	ug/L	9.667
83 Kr	113.913242	92.637	484.680	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	94.384
Cr	50	
Cr	53	
Cu	63	
Ge	72	94.384
Pd	106	
Kr	83	

BJones

**Sample ID: JL4Q2L**

Sample Description: G6L260000-54 LCSD

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 12:03:34

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JL4Q2L.021

Tuning File: c:\elandata\Tuning\default.fun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 102

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1501597.706	ug/L		1560668.074
27 Al	978.423219	1.067	6254184.160		ug/L		32420.959	
44 Ca	1267.256745	1.111	428358.984		ug/L		23909.959	
52 Cr	176.456836	1.378	1958862.632		ug/L		36026.683	
65 Cu	191.441248	0.476	495672.258		ug/L		120.321	
72 Ge-1			1168142.560		ug/L		1233935.303	
50 Cr	181.882370	1.770	45559.048		ug/L		-166.719	
53 Cr	148.300412	1.942	107729.269		ug/L		42239.566	
63 Cu	187.857326	1.019	364212.353		ug/L		85.001	
72 Ge			1168142.560		ug/L		1233935.303	
106 Pd	178.967704	0.654	33011.490		ug/L		9.667	
83 Kr	31.304257	87.003	453.012		ug/L		441.011	

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	94.668
Cr	50	
Cr	53	
Cu	63	
Ge	72	94.668
Pd	106	
Kr	83	

BJones

**Sample ID: JLVQR**

Sample Description: G6L200192-1

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 12:06:23

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JLVQR.022

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 27

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1467991.240	ug/L	1560668.074
27 Al	215.187734	3.669	1395720.704	ug/L	32420.959
44 Ca	494.228997	2.850	180425.576	ug/L	23909.959
52 Cr	1.077153	7.608	45748.973	ug/L	36026.683
65 Cu	18.272612	3.219	47290.709	ug/L	120.321
72 Ge-1			1135781.018	ug/L	1233935.303
50 Cr	3.086133	11.671	615.777	ug/L	-166.719
53 Cr	-48.939460	2.412	17603.875	ug/L	42239.566
63 Cu	18.365710	3.261	35587.491	ug/L	85.001
72 Ge			1165781.018	ug/L	1233935.303
106 Pd	2.485593	1.000	468.013	ug/L	9.667
83 Kr	32.173823	88.943	453.345	ug/L	441.011

### Internal Standard Recoveries

Analyte Mass	Int Std % Recovery
--------------	--------------------

Sc	45
Al	27
Ca	44
Cr	52
Cu	65
Ge-1	72 94.477
Cr	50
Cr	53
Cu	63
Ge	72 94.477
Pd	106
Kr	83

BJones

**Sample ID: JLVQRP5**

Sample Description: G6L200192-1 5X

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 12:09:12

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JLVQRP5.023

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 28

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1506815.568	ug/L	1560668.074
27 Al	45.976585	3.279	328009.502	ug/L	32420.959
44 Ca	98.948332	1.169	55129.475	ug/L	23909.959
52 Cr	0.254093	7.981	37431.236	ug/L	36026.683
65 Cu	3.580134	2.951	9522.810	ug/L	120.321
72 Ge-1			1185646.991	ug/L	1233935.303
50 Cr	0.627072	19.027	-0.125	ug/L	-166.719
53 Cr	-13.317477	10.863	34415.907	ug/L	42239.566
63 Cu	3.619912	1.438	7204.298	ug/L	85.001
72 Ge			1185646.991	ug/L	1233935.303
106 Pd	0.500724	2.865	102.001	ug/L	9.667
83 Kr	11.304263	179.250	445.345	ug/L	441.011

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	96.087
Cr	50	
Cr	53	
Cu	63	
Ge	72	96.087
Pd	106	
Kr	83	

BJones

**Sample ID: JLVQRZ**

Sample Description: G6L200192-1 PS

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 12:12:03

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JLVQRZ.024

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 29

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1517729.545	ug/L	1560668.074
27 Al	1258.659461	0.766	8127174.835	ug/L	32420.959
44 Ca	1704.244049	0.639	574678.343	ug/L	23909.959
52 Cr	196.280636	1.706	2199439.046	ug/L	36026.683
65 Cu	225.381939	0.806	590132.717	ug/L	120.321
72 Ge-1			1181327.047	ug/L	1233935.303
50 Cr	198.204012	2.441	50215.294	ug/L	-166.719
53 Cr	168.762043	1.486	118401.700	ug/L	42239.566
63 Cu	221.760301	0.833	434785.204	ug/L	85.001
72 Ge			1181327.047	ug/L	1233935.303
106 Pd	199.212573	1.100	36744.664	ug/L	9.667
83 Kr	52.173835	65.384	461.012	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	95.737
Cr	50	
Cr	53	
Cu	63	
Ge	72	95.737
Pd	106	
Kr	83	

BJones

**Sample ID: JLVQW**

Sample Description: G6L200192-2

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 12:14:53

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JLVQW.025

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 30

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1520954.687	ug/L	1560668.074
27 Al	230.866117	0.350	1516156.386	ug/L	32420.959
44 Ca	607.382078	1.501	219554.442	ug/L	23909.959
52 Cr	1.200208	2.250	47732.185	ug/L	36026.683
65 Cu	11.624278	0.620	30545.149	ug/L	120.321
72 Ge-1			1181344.527	ug/L	1233935.303
50 Cr	1.827118	113.144	302.727	ug/L	-166.719
53 Cr	-48.975863	2.682	17816.698	ug/L	42239.566
63 Cu	11.744360	0.876	23103.761	ug/L	85.001
72 Ge			1181344.527	ug/L	1233935.303
106 Pd	2.707948	12.803	509.015	ug/L	9.667
83 Kr	30.434684	50.224	452.678	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	95.738
Cr	50	
Cr	53	
Cu	63	
Ge	72	95.738
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: JLVQ1**

Sample Description: G6L200192-3

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 12:17:43

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JLVQ1.026

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 31

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1531500.777	ug/L	1560668.074
27 Al	460.470569	2.628	2981129.358	ug/L	32420.959
44 Ca	700.866352	1.889	248838.221	ug/L	23909.959
52 Cr	1.200454	4.407	47546.498	ug/L	36026.683
65 Cu	24.346456	0.844	63602.013	ug/L	120.321
72 Ge-1			1176803.218	ug/L	1233935.303
50 Cr	5.104382	17.138	1132.745	ug/L	-166.719
53 Cr	-47.349913	4.974	18487.614	ug/L	42239.566
63 Cu	24.363202	1.441	47652.919	ug/L	85.001
72 Ge			1176803.218	ug/L	1233935.303
106 Pd	2.933918	6.637	550.684	ug/L	9.667
83 Kr	46.086865	49.454	458.679	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	95.370
Cr	50	
Cr	53	
Cu	63	
Ge	72	95.370
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: JLVQ3**

Sample Description: G6L200192-4

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 12:20:34

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JLVQ3.027

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 32

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1559564.414	ug/L	1560668.074
27 Al	243.253186	0.171	1613446.904	ug/L	32420.959
44 Ca	503.478870	0.595	137961.375	ug/L	23909.959
52 Cr	1.301611	8.153	49386.691	ug/L	36026.683
65 Cu	20.202960	1.201	53586.715	ug/L	120.321
72 Ge-1			1194392.439	ug/L	1233935.303
50 Cr	3.470785	2.826	730.681	ug/L	-166.719
53 Cr	-46.857898	5.806	18998.063	ug/L	42239.566
63 Cu	20.296183	0.778	40307.622	ug/L	85.001
72 Ge			1194392.439	ug/L	1233935.303
106 Pd	2.794720	7.061	525.016	ug/L	9.667
83 Kr	20.869468	43.301	449.012	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	96.795
Cr	50	
Cr	53	
Cu	63	
Ge	72	96.795
Pd	106	
Kr	83	

**Sample ID: JLVQ4**

Sample Description: G6L200192-5

Batch ID: 6360054

Sample Date/Time: Thursday, December 28, 2006 12:23:25

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\JLVQ4.028

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 33

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1566768.865	ug/L	1560668.074
27 Al	856.559354	0.603	5687119.577	ug/L	32420.959
44 Ca	1208.463637	0.554	425100.681	ug/L	23909.959
52 Cr	1.997071	1.853	58011.677	ug/L	36026.683
65 Cu	67.042306	0.203	180253.038	ug/L	120.321
72 Ge-1			1212501.147	ug/L	1233935.303
50 Cr	8.454373	3.331	2041.721	ug/L	-166.719
53 Cr	-46.497852	4.402	19461.865	ug/L	42239.566
63 Cu	67.525317	0.816	135945.871	ug/L	85.001
72 Ge			1212501.147	ug/L	1233935.303
106 Pd	2.087890	4.889	394.676	ug/L	9.667
83 Kr	114.782709	56.270	485.013	ug/L	441.011

### Internal Standard Recoveries

Analyte Mass	Int Std % Recovery
--------------	--------------------

Sc 45	
Al 27	
Ca 44	
Cr 52	
Cu 65	
Ge-1 72	98.263
Cr 50	
Cr 53	
Cu 63	
Ge 72	98.263
Pd 106	
Kr 83	

SOP No. SAC-MT-0001

BJones

**Sample ID: CCV 3**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 12:26:18

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCV 3.029

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Infens. Mean	Sample Unit	Blank Intensity
45 Sc			1586254.606	ug/L	1560668.074
27 Al	5370.822080	1.248	35847228.818	ug/L	32420.959
44 Ca	5275.544983	0.491	1794608.817	ug/L	23909.959
52 Cr	101.992971	1.192	1202151.910	ug/L	36026.683
65 Cu	100.938832	0.593	274065.417	ug/L	120.321
72 Ge-1			1224766.871	ug/L	1233935.303
50 Cr	103.520526	3.919	27107.484	ug/L	-166.719
53 Cr	102.264469	0.482	90906.145	ug/L	42239.566
63 Cu	100.057948	1.584	203412.325	ug/L	85.001
72 Ge			1224766.871	ug/L	1233935.303
106 Pd	99.538074	1.184	18364.587	ug/L	9.667
83 Kr	17.391237	255.588	447.678	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	99.257
Cr	50	
Cr	53	
Cu	63	
Ge	72	99.257
Pd	106	
Kr	83	

BJones

**Sample ID: CCB 3**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 12:29:11

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCB 3.030

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1585610.804	ug/L	1560668.074
27 Al	0.262348	6.834	33928.656	ug/L	32420.959
44 Ca	-0.518611	230.878	23554.996	ug/L	23909.959
52 Cr	0.135224	17.832	37303.685	ug/L	36026.683
65 Cu	0.010966	23.623	149.140	ug/L	120.321
72 Ge-1			1224759.984	ug/L	1233935.303
50 Cr	-0.097389	86.640	-191.289	ug/L	-166.719
53 Cr	-1.637198	77.656	41145.893	ug/L	42239.566
63 Cu	0.000656	933.988	85.668	ug/L	85.001
72 Ge			1224759.984	ug/L	1233935.303
106 Pd	0.014461	78.062	12.333	ug/L	9.667
83 Kr	-7.826107	698.408	438.011	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	99.256
Cr	50	
Cr	53	
Cu	63	
Ge	72	99.256
Pd	106	
Kr	83	

BJones

**Sample ID: CCV 4**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 12:32:04

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCV 4.031

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1563071.602	ug/L	1560668.074
27 Al	5322.622849	0.434	35308170.152	ug/L	32420.959
44 Ca	5260.517441	0.215	1778519.621	ug/L	23909.959
52 Cr	101.387711	0.901	1187944.512	ug/L	36026.683
65 Cu	100.721625	0.536	271779.650	ug/L	120.321
72 Ge-1			1217142.792	ug/L	1233935.303
50 Cr	104.972826	3.946	27318.972	ug/L	-166.719
53 Cr	101.505413	2.476	89986.798	ug/L	42239.566
63 Cu	100.213419	0.493	202488.234	ug/L	85.001
72 Ge			1217142.792	ug/L	1233935.303
106 Pd	98.447586	0.485	18163.500	ug/L	9.667
83 Kr	30.434684	49.487	452.678	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	98.639
Cr	50	
Cr	53	
Cu	63	
Ge	72	98.639
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: CCB 4**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 12:34:58

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCB 4.032

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1581852.226	ug/L	1560668.074
27 Al	0.440528	24.615	35017.283	ug/L	32420.959
44 Ca	-0.880100	147.467	23369.506	ug/L	23909.959
52 Cr	0.209003	31.167	38039.863	ug/L	36026.683
65 Cu	0.004838	143.894	132.180	ug/L	120.321
72 Ge-1			1221249.513	ug/L	1233935.303
50 Cr	0.032861	191.115	-156.371	ug/L	-166.719
53 Cr	-0.848631	235.455	41400.196	ug/L	42239.566
63 Cu	0.003063	40.423	90.335	ug/L	85.001
72 Ge			1221249.513	ug/L	1233935.303
106 Pd	-0.001808	1249.000	9.333	ug/L	9.667
83 Kr	79.999946	17.960	471.679	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	98.972
Cr	50	
Cr	53	
Cu	63	
Ge	72	98.972
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: CCV 5**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:06:12

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCV 5.043

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1545511.135	ug/L	1560668.074
27 Al	5391.980575	0.758	34916378.313	ug/L	32420.959
44 Ca	5328.816420	1.128	1758369.906	ug/L	23909.959
52 Cr	102.006760	1.303	1166426.401	ug/L	36026.683
65 Cu	101.422182	0.729	237153.905	ug/L	120.321
72 Ge-1			1188155.606	ug/L	1233935.303
50 Cr	105.888809	1.705	26911.285	ug/L	-166.719
53 Cr	104.453792	2.657	39203.395	ug/L	42239.566
63 Cu	100.562535	1.899	198351.953	ug/L	85.001
72 Ge			1138155.606	ug/L	1233935.303
106 Pd	96.016738	0.712	17715.249	ug/L	9.667
83 Kr	53.912984	89.919	461.679	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	96.290
Cr	50	
Cr	53	
Cu	63	
Ge	72	96.290
Pd	106	
Kr	83	

BJones

**Sample ID: CCB 5**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:09:06

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCB 5.044

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1552059.521	ug/L	1560668.074
27 Al	0.495935	6.149	34566.815	ug/L	32420.959
44 Ca	-4.904799	15.799	21513.420	ug/L	23909.959
52 Cr	0.233366	15.944	37432.246	ug/L	36026.683
65 Cu	0.005347	102.627	130.472	ug/L	120.321
72 Ge-1			1192974.888	ug/L	1233935.303
50 Cr	-0.129010	17.289	-194.277	ug/L	-166.719
53 Cr	0.662245	135.220	41148.185	ug/L	42239.566
63 Cu	0.004600	125.448	91.335	ug/L	85.001
72 Ge			1192974.888	ug/L	1233935.303
106 Pd	0.014461	57.282	12.333	ug/L	9.667
83 Kr	-53.912957	65.337	420.343	ug/L	441.011

### Internal Standard Recoveries

Analyte Mass	Int Std % Recovery
--------------	--------------------

Sc 45	
Al 27	
Ca 44	
Cr 52	
Cu 65	
Ge-1 72	96.681
Cr 50	
Cr 53	
Cu 63	
Ge 72	96.681
Pd 106	
Kr 83	

BJones

**Sample ID: CCV 6**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:11:59

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCV 6.045

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1542580.303	ug/L	1560668.074
27 Al	5389.285819	0.657	34997081.914	ug/L	32420.959
44 Ca	5332.268527	0.405	1764442.339	ug/L	23909.959
52 Cr	101.226417	1.041	1161059.483	ug/L	36026.683
65 Cu	99.693484	0.288	263339.906	ug/L	120.321
72 Ge-1			1191485.359	ug/L	1233935.303
50 Cr	108.461350	4.742	27642.611	ug/L	-166.719
53 Cr	101.283832	2.710	87980.933	ug/L	42239.566
63 Cu	99.324299	0.297	196462.980	ug/L	85.001
72 Ge			1191485.359	ug/L	1233935.303
106 Pd	95.683457	0.684	17653.792	ug/L	9.667
83 Kr	49.565156	100.415	460.012	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass	Int Std % Recovery
Sc 45	
Al 27	
Ca 44	
Cr 52	
Cu 65	
Ge-1 72	96.560
Cr 50	
Cr 53	
Cu 63	
Ge 72	96.560
Pd 106	
Kr 83	

BJones

**Sample ID: CCB 6**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:14:53

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCB 6.046

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1555670.944	ug/L	1560668.074
27 Al	0.685410	10.007	35810.799	ug/L	32420.959
44 Ca	-4.370687	19.673	21695.196	ug/L	23909.959
52 Cr	0.280403	8.250	37972.562	ug/L	36026.683
65 Cu	0.014981	50.658	156.024	ug/L	120.321
72 Ge-1			1193504.262	ug/L	1233935.303
50 Cr	-0.058127	72.703	-176.123	ug/L	-166.719
53 Cr	0.452339	523.891	41072.704	ug/L	42239.566
63 Cu	0.005427	74.745	93.001	ug/L	85.001
72 Ge			1193504.262	ug/L	1233935.303
106 Pd	-0.014461	99.216	7.000	ug/L	9.667
83 Kr	12.173829	182.249	445.678	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	96.723
Cr	50	
Cr	53	
Cu	63	
Ge	72	96.723
Pd	106	
Kr	83	

SOP No. SAC-MT-0001

BJones

**Sample ID: LLSTD1**

Sample Description: LL STD @ 10X

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:17:44

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\LLSTD1.047

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 83

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1559098.424	ug/L	1560668.074
27 Al	64.002009	0.769	451516.869	ug/L	32420.959
44 Ca	59.081361	0.439	42852.682	ug/L	23909.959
52 Cr	1.067124	5.109	47180.553	ug/L	36026.683
65 Cu	1.097113	2.306	3046.448	ug/L	120.321
72 Ge-1			1204722.731	ug/L	1233935.303
50 Cr	1.601181	8.155	252.376	ug/L	-166.719
53 Cr	-7.279870	19.913	37812.472	ug/L	42239.566
63 Cu	1.115587	1.393	2313.189	ug/L	85.001
72 Ge			1204722.731	ug/L	1233935.303
106 Pd	0.925529	6.454	180.335	ug/L	9.667
83 Kr	-0.869511	10822.860	440.678	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	97.633
Cr	50	
Cr	53	
Cu	63	
Ge	72	97.633
Pd	106	
Kr	83	

BJones

**Sample ID: LLSTD2**

Sample Description: LL STD @ 5X

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:20:33

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\LLSTD2.048

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 84

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1580521.702	ug/L		1560668.074
27 Al	124.855153	1.866			850935.470	ug/L		32420.959
44 Ca	114.128254	1.005			61047.889	ug/L		23909.959
52 Cr	1.970855	2.251			57363.087	ug/L		36026.683
65 Cu	2.076605	1.597			5663.248	ug/L		120.321
72 Ge-1					1205135.607	ug/L		1233935.303
50 Cr	3.573602	12.375			764.191	ug/L		-166.719
53 Cr	-12.297912	3.214			35458.037	ug/L		42239.566
63 Cu	2.090965	1.576			4264.241	ug/L		85.001
72 Ge					1205135.607	ug/L		1233935.303
106 Pd	1.865538	2.941			353.674	ug/L		9.667
83 Kr	-211.303097	21.842			360.007	ug/L		441.011

**Internal Standard Recoveries**

Analyte	Mass	Int Std	% Recovery
Sc	45		
Al	27		
Ca	44		
Cr	52		
Cu	65		
Ge-1	72	97.666	
Cr	50		
Cr	53		
Cu	63		
Ge	72	97.666	
Pd	106		
Kr	83		

BJones

**Sample ID: ICSA**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:23:22

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\ICSA.049

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 2

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1372610.438	ug/L	1560668.074
27 Al	103500.152676	0.454	596170603.389	ug/L	32420.959
44 Ca	103752.111473	0.348	30099894.680	ug/L	23909.959
52 Cr	1.355284	4.186	44268.038	ug/L	36026.683
65 Cu	0.025985	329.879	163.698	ug/L	120.321
72 Ge-1			1057757.448	ug/L	1233935.303
50 Cr	133.434449	10.801	30224.923	ug/L	-166.719
53 Cr	-2.815156	9.912	35044.407	ug/L	42239.566
63 Cu	5.448626	1.443	9636.168	ug/L	85.001
72 Ge			1057757.448	ug/L	1233935.303
106 Pd	0.620030	4.008	124.001	ug/L	9.667
83 Kr	761.750677	8.396	733.031	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass	Int Std % Recovery
Sc 45	
Al 27	
Ca 44	
Cr 52	
Cu 65	
Ge-1 72	85.722
Cr 50	
Cr 53	
Cu 63	
Ge 72	85.722
Pd 106	
Kr 83	

BJones

**Sample ID: ICSAB**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:26:13

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\ICSAB.050

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 1

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc				1371494.514		ug/L	1560668.074
27 Al	101919.430820	0.756		591820886.249		ug/L	32420.959
44 Ca	102738.680691	0.380		30047841.759		ug/L	23909.959
52 Cr	103.605139	1.014		1062761.303		ug/L	36026.683
65 Cu	90.621003	0.318		214241.462		ug/L	120.321
72 Ge-1				1066340.755		ug/L	1233935.303
50 Cr	234.647360	6.726		53693.207		ug/L	-166.719
53 Cr	86.149909	1.573		72426.388		ug/L	42239.566
63 Cu	95.809685	1.031		169607.006		ug/L	85.001
72 Ge				1066340.755		ug/L	1233935.303
106 Pd	86.680319	0.658		15993.604		ug/L	9.667
83 Kr	740.010919	11.988		724.697		ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	86.418
Cr	50	
Cr	53	
Cu	63	
Ge	72	86.418
Pd	106	
Kr	83	

BJones

**Sample ID: Rinse**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:29:05

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\Rinse.051

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 6

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1586095.188	ug/L	1560668.074
27 Al	2.267811	5.576	48338.158	ug/L	32420.959
44 Ca	-8.237776	7.656	21426.537	ug/L	23909.959
52 Cr	-0.142269	26.603	34879.383	ug/L	36026.683
65 Cu	0.002465	270.077	128.988	ug/L	120.321
72 Ge-1			1251657.864	ug/L	1233935.303
50 Cr	0.230925	16.229	-106.885	ug/L	-166.719
53 Cr	-8.205414	5.345	38831.131	ug/L	42239.566
63 Cu	-0.002357	115.034	81.334	ug/L	85.001
72 Ge			1251657.864	ug/L	1233935.303
106 Pd	0.003615	312.250	10.333	ug/L	9.667
83 Kr	-52.173813	98.361	421.010	ug/L	441.011

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	101.436
Cr	50	
Cr	53	
Cu	63	
Ge	72	101.436
Pd	106	
Kr	83	

BJones

**Sample ID: CCV 7**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:31:59

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCV 7.052

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 4

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

**Sample Result Summary**

Mass Analyte	Conc.	Mean	Conc.	RSD	Meas. Intens.	Mean	Sample Unit	Blank Intensity
45 Sc					1543224.105	ug/L	1560668.074	
27 Al	5294.515446	0.773	35310584.363		ug/L	32420.959		
44 Ca	5225.721229	0.736	1776342.596		ug/L	23909.959		
52 Cr	100.672950	0.619	1136068.016		ug/L	36026.683		
65 Cu	100.232920	0.996	271916.175		ug/L	120.321		
72 Ge-1			1223693.891		ug/L	1233935.303		
50 Cr	104.415615	2.681	27324.866		ug/L	-166.719		
53 Cr	90.678215	0.753	85282.132		ug/L	42239.566		
63 Cu	99.837391	1.271	202799.718		ug/L	85.001		
72 Ge			1223693.891		ug/L	1233935.303		
106 Pd	95.690712	1.382	17655.129		ug/L	9.667		
83 Kr	59.999947	81.224	464.012		ug/L	441.011		

**Internal Standard Recoveries**

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	99.170
Cr	50	
Cr	53	
Cu	63	
Ge	72	99.170
Pd	106	
Kr	83	

BJones

**Sample ID: CCB 7**

Sample Description:

Batch ID:

Sample Date/Time: Thursday, December 28, 2006 13:34:53

Method File: C:\elandata\Method\6360054R.mth

Dataset File: C:\elandata\Dataset\061228A1\CCB 7.053

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Autosampler Position: 5

Number of Replicates: 3

Dual Detector Mode: Dual

Initial Sample Quantity (mg):

Sample Prep Volume (mL):

Aliquot Volume (mL):

Diluted To Volume (mL):

### Sample Result Summary

Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
45 Sc			1574224.705	ug/L	1560668.074
27 Al	0.853385	2.251	37871.451	ug/L	32420.959
44 Ca	-9.247554	7.583	20627.621	ug/L	23909.959
52 Cr	-0.161259	12.627	33913.595	ug/L	36026.683
65 Cu	0.006920	84.585	138.109	ug/L	120.321
72 Ge-1			1224777.877	ug/L	1233935.303
50 Cr	0.167292	33.366	-121.416	ug/L	-166.719
53 Cr	-7.968471	18.385	38113.116	ug/L	42239.566
63 Cu	0.005086	101.650	94.668	ug/L	85.001
72 Ge			1224777.877	ug/L	1233935.303
106 Pd	0.005423	585.946	10.667	ug/L	9.667
83 Kr	8.695644	849.236	444.345	ug/L	441.011

### Internal Standard Recoveries

Analyte Mass Int Std % Recovery

Sc	45	
Al	27	
Ca	44	
Cr	52	
Cu	65	
Ge-1	72	99.258
Cr	50	
Cr	53	
Cu	63	
Ge	72	99.258
Pd	106	
Kr	83	

## Sample Preparation Log

STL SACRAMENTO  
Metals - Air Toxics - Preparation Log

Date: 26-Dec-06

Analyst: LoeraM

## **Matrix: AIR**

**Fraction:**      **Filter**

SOP:

## Method: ICPMS

For 1" filter: factor = 9 (9/1)  
For 0.75" filter factor = 12 (9/0.75)

Page 1 of 1  
QA-372B mlt 02/20/03

STL Sacramento  
Metals Preparation Spiking  
Documentation Form

SEVERN  
TRENT

STL

Lot # G6L200192-(1-5); G6L200196-(1,2); G6L200199-(1-5)

Batch Number:	<u>1360054</u>	EPA Analytical Method ID:	<u>6020</u>	Spiked Date:	<u>12/26/06</u>
MS Run #:	<u>12126106 mC</u>	EPA Prep Method ID:	<u>2A</u>	Hot Plate Microwave ID:	<u>3</u>
Analyst Initial/Date:	<u>mc/12/26/06</u>	Witness Initial/Date:	<u>12/26/06 NT</u>	Initial:	<u>B 90</u>
Correct Folder ID	<u>12/26/06 mC</u>	Witness:		Final:	<u>91°</u>
				Thermometer ID:	<u>BT012</u>

Check If Used	Bottle Name	Elements	Stock Concentration (mg/L)	Tracking Number	LCS/DCS Volume Spiked	MS/SD Volume Spiked	Expiration Date
	ICP Part 1 5% HNO <sub>3</sub>	Ca, Mg Al, As, Ba, Se, Sn, Tl Fe, Mo, Ti Sb, Co, Pt, Mn, Ni, V, Zn Cu Cr , Be, Cd Ag	5,000 200 100 50 25 20 5 5.0				
	ICP Part 2 2% HNO <sub>3</sub>	K, Na P, S B, Li, Sr	5,000 1,000 100				
	SiH2O/Ti HF	Si	1,000				<u>12/26/06 mC</u>
✓	XCAL-45 5% HNO <sub>3</sub>	Al, K, Mg, Ca, Na, Fe, P, B, Si As, Be, Cd, Cr, Co, Cu, Pb, Mn, Mo, Ni, Se, U, V, Zn, Ba, Li, Sn, Sr, Ti Sb, Ag, Tl	50 10 2.5	1774-met 8-16	2.0ml		<u>12/07</u>
	Misc. Elements						<u>12/26/06 mC</u>

Prep Reagents:

Check If Used	Reagent	Supplier	Lot Number	Check If Used	Reagent	Supplier	Lot Number
✓	70% HNO <sub>3</sub>	Mallinckrodt	<u>C37055</u>		30% H <sub>2</sub> O <sub>2</sub>	Mallinckrodt	<u>12/26/06 mC</u>
	37% HCl	Mallinckrodt			49% HF	Fisher	

ICP matrix spike and LCS: For final volumes of 100ml, add 1ml from bottles ICP Part 1, ICP Part 2. Add 1ml of Silica (Si) when requested.

ICPMS matrix spike and LCS: For final volumes of 100ml, add 2ml of XCAL-45.

Amount to spike is as listed above for final volumes of 100ml. If a different final volume is used, increase or decrease the amount you spike proportionally.

# AIR, 9056, Sulfate

## **General Anions by IC**

***Fluoride***

***Chloride***

***Nitrite***

***Bromide***

***Nitrate***

***Phosphate***

***Sulfate***

# STL Sacramento

## LEVEL 1&2 REVIEW CHECKLIST GENERAL CHEMISTRY

LAB NUMBERS: G6L200335, G6L210203, G6L260116, G6L200192, G6L200196 and G6L200999

ANALYSIS: 300.0 DATE: 12/27/06 ANALYST: OS

### LEVEL 1 RUN REVIEW:

1. Samples are properly preserved and verified
2. Run set-up meets standard criteria (Curve, ICV, ICB, REF...CCV,CCB..)
3. Calibration criteria met
4. Calibration verifications and second source reference are in control
5. Batch QC are in control (Blank, LCS, MSQC, LCS dup when necessary)
6. Calculations have been checked
7. QAS +/or QAPP was consulted and followed for client specifics
8. Standard Tracking # noted on benchsheet +/or runlog
9. Manual integration performed, documented and approved

YES	NO	NA
✓		✓
✓		
✓		
✓		
✓		
✓		
✓		
✓		
		✓

### LEVEL 1 DATA REVIEW:

1. Benchsheet complete
2. QAS +/or QAPP consulted and followed for client specifics for data entry
3. Data entered properly
4. Copy of prep sheet and prep checklist attached to run
5. Analyst observations, HTV's, Anomalies properly documented and attached to run.

✓		
✓		
✓		
		✓

Completed By & Date: OS 12/28/06

### LEVEL 2 REVIEW:

1. Level 1 checklist complete and verified
2. Deviations, Anomalies, Holding times checked and approved
3. Reprep/Reanalysis documented and chemist notified
4. Client specific criteria met
5. Data entry checked and released in Quantims
6. Indication on benchsheet on review and release (dated & signed)
7. Manual integration reviewed, approved, and properly documented

✓		
✓		
✓		
✓		
✓		

Completed By & Date: JDR 1-7-07

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

QA-159 NEK 7/00

## Sulfate in Filters

<b>Lot:</b>	G6L200192, G6L200196 and G6L200199				<b>Analysis Date:</b>	12/27/06	
<b>Default RL =</b>	<b>0.040</b>	<b>mg/Filter</b>	<b>Batch:</b>	6361402			
<u>Sample ID</u>	<u>Work Order</u>	<u>Dilution for Fraction of Filter Analyzed*</u>	<u>Instrument</u>	<u>Adjusted Dilution Factor</u>	<u>Sulfate (mg/L)</u>	<u>RL</u>	<u>Total Sulfate (mg/Filter)</u>
G6L200192-1	JLVQR	12	1	12	0.873	0.4800	0.4190
G6L200192-2	JLVQW	12	1	12	1.222	0.4800	0.5866
G6L200192-3	JLVQ1	12	1	12	1.119	0.4800	0.5371
G6L200192-4	JLVQ3	12	1	12	1.018	0.4800	0.4886
G6L200192-5	JLVRA	12	1	12	2.227	0.4800	1.0690
G6L200196-1	JLVRA	12	1	12	0.719	0.4800	0.3451
G6L200196-2	JLVRF	12	1	12	0.981	0.4800	0.4709
G6L200196-3	JLVRL	12	1	12	1.140	0.4800	0.5472
G6L200196-4	JLVRN	12	1	12	ND	0.4800	
G6L200196-5	JLVRG	12	1	12	3.967	0.4800	1.9042
G6L200199-1	JLVVG	12	1	12	1.610	0.4800	0.7728
G6L200199-2	JLVVJ	12	1	12	1.764	0.4800	0.8467
G6L200199-3	JLVVK	12	1	12	1.921	0.4800	0.9221
G6L200199-4	JLVVL	12	1	12	ND	0.4800	
G6L200199-5	JLVVM	12	1	12	3.147	0.4800	1.5106
MB		12	1	12	0.098	0.4800	0.0470
LCS		12	1	12	9.768	0.4800	4.6886
DSC		12	1	12	9.835	0.4800	4.7208
<b>* Dilution for Fraction of Filter Analyzed -----&gt;</b>							
<b>If entire Filter is used, enter 1</b>							
<b>If only a portion of Filter is used, enter "Dilution" based on the fraction used</b>							
(i.e. if 1/12 of filter is used for analysis, enter 12; if half of filter is used, enter 2, etc)							
<b>LCS True Value =</b>	<b>4.800</b>	<b>mg/Filter</b>					
<b>MS/SD True Value =</b>	<b>A</b>						
<b>Analyst:</b>	<b>DS</b>						
<b>Date Entered:</b>	<b>12/28/06</b>						
<b>Reviewed By:</b>	<b>TS/C</b>	<b>17-07</b>					

RQC050

Severn Trent Laboratories, Inc.  
WET CHEM BATCHSHEET

Run Date: 12/27/06

Time: 14:54:02

STL Sacramento

## PRODUCTION FIGURES - WET CHEM

<u>TOTAL NUMBER</u>	<u>SAMPLE NUMBER</u>	<u>QC</u>	<u>RE-RUN MATRIX</u>	<u>RE-RUN OTHER</u>	<u>MISC NUMBER</u>	<u>TOTAL HOURS</u>	<u>EXPANDED DELIVERABLE</u>

METHOD: GK Sulfate (9056, Ion Chromatography)

QC BATCH #: 6361402 INITIALS: DATA ENTRY:

PREP DATE: 12/26/06 10:00 PREP INITIALS \_\_\_\_\_

COMP DATE: 12/26/06 11:00 ANAL \_\_\_\_\_ DATE \_\_\_\_\_

USER: OUNIS

<u>Work Order</u>	<u>Lab Number</u>	<u>Structured Analysis</u>	<u>Exp. Del.</u>	<u>Analysis Date</u>	<u>Sample ID:</u>
JLVQR-1-AL	G-6L200192-001	XX S 82 GK YM	Y-D	_____	P-0812
JLVQW-1-AL	G-6L200192-002	XX S 82 GK YM	Y-D	_____	P-0813
JLVQ1-1-AL	G-6L200192-003	XX S 82 GK YM	Y-D	_____	P-0814
JLVQ3-1-AL	G-6L200192-004	XX S 82 GK YM	Y-D	_____	P-0815
JLVQ4-1-AL	G-6L200192-005	XX S 82 GK YM	Y-D	_____	000580
JLVRA-1-AL	G-6L200196-001	XX S 82 GK YM	Y-D	_____	P-0820
JLVRF-1-AL	G-6L200196-002	XX S 82 GK YM	Y-D	_____	P-0821
JLVRL-1-AL	G-6L200196-003	XX S 82 GK YM	Y-D	_____	P-0822
JLVRN-1-AL	G-6L200196-004	XX S 82 GK YM	Y-D	_____	P-0824
JLVRQ-1-AL	G-6L200196-005	XX S 82 GK YM	Y-D	_____	P-0582
JLVVG-1-AL	G-6L200199-001	XX S 82 GK YM	Y-D	_____	P-0816
JLVVJ-1-AL	G-6L200199-002	XX S 82 GK YM	Y-D	_____	P-0817
JLVKV-1-AL	G-6L200199-003	XX S 82 GK YM	Y-D	_____	P-0818
JLVVL-1-AL	G-6L200199-004	XX S 82 GK YM	Y-D	_____	P-0819
JLVVM-1-AL	G-6L200199-005	XX S 82 GK YM	Y-D	_____	000581
JL60W-1-AA	G-6L270000-402-B	XX S 82 GK YM	_____	_____	INTRA-LAB BLANK
JL60W-1-AC	G-6L270000-402-C	XX S 82 GK YM	_____	_____	INTRA-LAB CHECK
JL60W-1-AD	G-6L270000-402-L	XX S 82 GK YM	_____	_____	INTRA-LAB CHECK

## Control Limits

PDE115

Severn Trent Laboratories, Inc.  
Inorganics Batch Review  
QC Batch 6361402

Date 12/28/2006  
Time 14:36:19

Method Code: GK Sulfate (9056, Ion Chromatography)

Analyst: Sonia Ouni

Work Order	Result	Units	LDL/Dil	Prep - Anal	Total Solids	PSRL Flag	R/R	Rounded Output
JLVQR-1-AL	0.419	mg	0.48	12/26-12/27/06	.00	N		0.42 B
JLVQN-1-AL	0.587	mg	0.48	12/26-12/27/06	.00	N		0.48
JLVQ1-1-AL	0.537	mg	0.48	12/26-12/27/06	.00	N		0.54
JLVQ3-1-AL	0.489	mg	0.48	12/26-12/27/06	.00	N		0.48
JLVQ4-1-AL	1.069	mg	0.48	12/26-12/27/06	.00	N		1.1
JLVRA-1-AL	0.345	mg	0.48	12/26-12/27/06	.00	N		0.34 B
JLVRF-1-AL	0.471	mg	0.48	12/26-12/27/06	.00	N		0.47 B
JLVRL-1-AL	0.547	mg	0.48	12/26-12/27/06	.00	N		0.55
JLVRN-1-AL	ND	mg	0.48	12/26-12/27/06	.00	N		ND
JLVRQ-1-AL	1.904	mg	0.48	12/26-12/27/06	.00	N		1.9
JLVWG-1-AL	0.773	mg	0.48	12/26-12/27/06	.00	N		0.77
JLVVJ-1-AL	0.847.	mg	0.48	12/26-12/27/06	.00	N		0.85
JLVVK-1-AL	0.922	mg	0.48	12/26-12/27/06	.00	N		0.92
JLVVL-1-AL	ND	mg	0.48	12/26-12/27/06	.00	N		ND
JLVVM-1-AL	1.511	mg	0.48	12/26-12/27/06	.00	N		1.5
JL60W-1-AA	0.047	mg	0.48	12/26-12/27/06	.00	ND		0.48

Notes:  
B Estimated result. Result is less than RL.

LCS - LCSD	Exception Code	Measured Sample	True Spike	Measured	PCT. SPIKE	Recovered DUP	RPD	Prep - Anal	Dil.
Work Order	JL60W-1-AC	4.800	4.6386	4.7208	97.67	98.35	.68	12/27/06	1.00

Notes:

TEST	TOTAL #	SAMPLE #	PRODUCTION TOTALS	MATRIX #	OTHER #	MLSC #	HOURS
	0	0	0	0	0	0	0

crt.: 12/27/06

crt. exp: 01/29/06

Method 300.0

Sequence: 061227A

Operator: ounis Fluent: 2267-wc - 43-7

Page 1 of 8

Printed: 12/28/2006 2:54:39 PM

SONIA DOU

12/27/06

Title: AS14A 013004  
 Datasource: D4N34341\_local Spike: z724-wc-40-10  
 Location: ICS1000\SEQUENCES\2006\DECEMBER 2006  
 Timebase: ICS1000  
 #Samples: 51

Created: 12/26/2006 4:21:47 PM by ounis  
 Last Update: 12/28/2006 2:54:16 PM by ounis

No.	Name	Dil. Factor	Type	F [ppm] Fluoride	CL [ppm] Chloride	NO2 [ppm] Nitrite	Br [ppm] Bromide	NO3 [ppm] Nitrate	PO4 [ppm] Phosphate
1	BLANK	1.0000	Unknown	n.a.	n.a.	n.a.	0.810	n.a.	n.a.
2	1R	1.0000	Standard	0.511	0.979	0.050	0.491	0.050	0.203
3	2R	1.0000	Standard	2.422	4.745	0.484	2.460	0.499	2.387
4	3R	1.0000	Standard	4.922	9.668	1.018	5.011	0.989	5.026
5	4R	1.0000	Standard	10.027	20.022	2.004	10.148	2.023	10.127
6	5R	1.0000	Standard	25.205	50.875	4.991	24.843	4.985	24.953
7	6R	1.0000	Standard	49.912	99.670	10.003	50.047	10.004	50.003
8	ICV	1.0000	Unknown	30.822	76.875	7.632	30.242	7.532	30.002
9	DCV	1.0000	Unknown	30.969	77.016	7.734	30.161	7.506	29.990
10	ICB	1.0000	Unknown	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11	JL447 2X G6L260116-1 <sup>Hg, SO4</sup>	2.0000	Unknown	n.a.	448.219	n.a.	4.079	n.a.	n.a.
12	JL447 10X G6L260116-1 <sup>X</sup>	10.0000	Unknown	n.a.	1143.124	n.a.	4.563	n.a.	n.a.
13	JL447 S 2X G6L260116-1 <sup>Hg, SO4</sup>	2.0000	Unknown	9.679	458.834	1.101	14.247	1.918	9.498
14	JL447 D 2X G6L260116-1 <sup>↓</sup>	2.0000	Unknown	9.732	455.499	1.075	14.329	2.185	9.625
15	JL447 S 20X G6L260116-1 <sup>CL</sup>	20.0000	Unknown	96.747	1394.081	17.637	104.292	20.432	97.800
16	JL447 D 20X G6L260116-1 <sup>↓</sup>	20.0000	Unknown	96.717	1398.225	17.559	103.649	19.672	98.616
17	JL45A 5X G6L260116-2 <sup>NO3, CL</sup>	5.0000	Unknown	n.a.	134.759	n.a.	1.304	n.a.	n.a.
18	JL45A 50X G6L260116-2 <sup>X</sup>	50.0000	Unknown	n.a.	128.733	n.a.	n.a.	n.a.	n.a.
19	JL45C 1X G6L260116-3 <sup>Hg, PO4</sup>	1.0000	Unknown	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
20	JL0C3 10X G6L210203-3 <sup>CL, SO4</sup>	10.0000	Unknown	n.a.	637.079	n.a.	3.373	n.a.	n.a.
21	CCV	1.0000	Unknown	25.393	51.200	5.040	25.079	4.994	25.048
22	CCB	1.0000	Unknown	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23	JL0DA 5X G6L210203-4 <sup>CL, SO4</sup>	5.0000	Unknown	n.a.	381.223	n.a.	1.678	n.a.	n.a.
24	JLW48 1X G6L200335-11 <sup>CL</sup>	1.0000	Unknown	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
25	JLVQR 1X G6L200192-1 <sup>SO4</sup>	1.0000	Unknown	0.099	0.190	n.a.	n.a.	0.589	0.569
26	JLVQW 1X G6L200192-2 <sup>↓</sup>	1.0000	Unknown	0.141	0.269	n.a.	n.a.	0.702	0.721
27	JLVQ1 1X G6L200192-3 <sup>↓</sup>	1.0000	Unknown	0.178	0.833	n.a.	n.a.	0.614	0.560
28	JLVQ3 1X G6L200192-4 <sup>↓</sup>	1.0000	Unknown	0.133	0.195	n.a.	n.a.	0.761	0.548
29	JLVQ4 1X G6L200192-5 <sup>↓</sup>	1.0000	Unknown	0.187	0.530	n.a.	n.a.	0.717	0.677
30	JLVRA 1X G6L200196-1 <sup>↓</sup>	1.0000	Unknown	0.121	0.253	n.a.	n.a.	0.294	0.539
31	JLVRF 1X G6L200196-2 <sup>↓</sup>	1.0000	Unknown	0.104	0.310	n.a.	n.a.	0.380	0.798
32	JLVRL 1X G6L200196-3 <sup>↓</sup>	1.0000	Unknown	0.132	0.816	n.a.	n.a.	0.426	0.597
33	CCV	1.0000	Unknown	24.956	51.039	5.036	25.049	4.998	24.890
34	CCB	1.0000	Unknown	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
35	JLVRN 1X G6L200196-4 <sup>SO4</sup>	1.0000	Unknown	0.110	n.a.	n.a.	n.a.	n.a.	0.457
36	JLVRQ 1X G6L200196-5 <sup>↓</sup>	1.0000	Unknown	0.145	1.140	n.a.	n.a.	0.460	0.706
37	JLVVG 1X G6L200199-1 <sup>↓</sup>	1.0000	Unknown	0.141	0.228	n.a.	n.a.	1.732	0.801
38	JLVVJ 1X G6L200199-2 <sup>↓</sup>	1.0000	Unknown	0.134	0.492	n.a.	n.a.	1.890	0.618
39	JLVVK 1X G6L200199-3 <sup>↓</sup>	1.0000	Unknown	0.216	1.335	n.a.	n.a.	1.609	0.668
40	JLVVL 1X G6L200199-4 <sup>↓</sup>	1.0000	Unknown	0.126	n.a.	n.a.	n.a.	n.a.	0.593

Method 300.0 ; reporting CL, NO3 and SO4

Sequence: 061227A  
Operator:ounis

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Printed: 12/28/2006 2:54:39 PM

Title: AS14A 013004

Datasource: D4N34341\_local  
Location: ICS1000\SEQUENCES\2006\DECEMBER 2006  
Timebase: ICS1000  
#Samples: 51

Created: 12/26/2006 4:21:47 PM by ounis  
Last Update: 12/28/2006 2:54:16 PM by ounis

No.	Name	SO4 [ppm] Sulfate	Status	Program
1	BLANK		n.a. Finished	AS14A PROGRAM
2	1R	1.036	Finished	AS14A PROGRAM
3	2R	4.956	Finished	AS14A PROGRAM
4	3R	9.989	Finished	AS14A PROGRAM
5	4R	20.217	Finished	AS14A PROGRAM
6	5R	49.713	Finished	AS14A PROGRAM
7	6R	100.093	Finished	AS14A PROGRAM
8	ICV	75.319	Finished	AS14A PROGRAM
9	DCV	74.957	Finished	AS14A PROGRAM
10	ICB		n.a. Finished	AS14A PROGRAM
11	JL447 2X G6L260116-1	0.619	Finished	AS14A PROGRAM
12	JL447 10X G6L260116-1	0.953	Finished	AS14A PROGRAM
13	JL447 S 2X G6L260116-1	20.034	Finished	AS14A PROGRAM
14	JL447 D 2X G6L260116-1	19.960	Finished	AS14A PROGRAM
15	JL447 S 20X G6L260116-1	198.470	Finished	AS14A PROGRAM
16	JL447 D 20X G6L260116-1	198.513	Finished	AS14A PROGRAM
17	JL45A 5X G6L260116-2	3959.501	Finished	AS14A PROGRAM
18	JL45A 50X G6L260116-2	6225.531	Finished	AS14A PROGRAM
19	JL45C 1X G6L260116-3		n.a. Finished	AS14A PROGRAM
20	JL0C3 10X G6L210203-3	138.748	Finished	AS14A PROGRAM
21	CCV	50.032	Finished	AS14A PROGRAM
22	CCB		n.a. Finished	AS14A PROGRAM
23	JL0DA 5X G6L210203-4	174.594	Finished	AS14A PROGRAM
24	JLW48 1X G6L200335-11		n.a. Finished	AS14A PROGRAM
25	JLVQR 1X G6L200192-1	0.873	Finished	AS14A PROGRAM
26	JLVQW 1X G6L200192-2	1.222	Finished	AS14A PROGRAM
27	JLVQ1 1X G6L200192-3	1.119	Finished	AS14A PROGRAM
28	JLVQ3 1X G6L200192-4	1.018	Finished	AS14A PROGRAM
29	JLVQ4 1X G6L200192-5	2.227	Finished	AS14A PROGRAM
30	JLVRA 1X G6L200196-1	0.719	Finished	AS14A PROGRAM
31	JLVRF 1X G6L200196-2	0.981	Finished	AS14A PROGRAM
32	JLVRL 1X G6L200196-3	1.140	Finished	AS14A PROGRAM
33	CCV	50.016	Finished	AS14A PROGRAM
34	CCB		n.a. Finished	AS14A PROGRAM
35	JLVRN 1X G6L200196-4		n.a. Finished	AS14A PROGRAM
36	JLVRQ 1X G6L200196-5	3.967	Finished	AS14A PROGRAM
37	JLVVG 1X G6L200199-1	1.610	Finished	AS14A PROGRAM
38	JLVVJ 1X G6L200199-2	1.764	Finished	AS14A PROGRAM
39	JLVVK 1X G6L200199-3	1.921	Finished	AS14A PROGRAM
40	JLVVL 1X G6L200199-4		n.a. Finished	AS14A PROGRAM

Title: AS14A 013004

Datasource: D4N34341\_local  
Location: ICS1000\SEQUENCES\2006\DECEMBER 2006  
Timebase: ICS1000  
#Samples: 51Created: 12/26/2006 4:21:47 PM by ounis  
Last Update: 12/28/2006 2:54:16 PM by ounis

No.	Name	Method	Inj. Date/Time	Inj. Vol.	Sample ID
1	BLANK	AS14A METHODHIGH 8PTCURVE	12/27/2006 9:08:43 AM	100.0	
2	1R	AS14A METHODHIGH 8PTCURVE	12/27/2006 9:27:13 AM	100.0	2724-WC-39-3
3	2R	AS14A METHODHIGH 8PTCURVE	12/27/2006 9:45:44 AM	100.0	2724-WC-39-7
4	3R	AS14A METHODHIGH 8PTCURVE	12/27/2006 10:04:14 AM	100.0	2724-WC-40-1
5	4R	AS14A METHODHIGH 8PTCURVE	12/27/2006 10:22:45 AM	100.0	2724-WC-40-4
6	5R	AS14A METHODHIGH 8PTCURVE	12/27/2006 10:41:15 AM	100.0	2724-WC-40-7
7	6R	AS14A METHODHIGH 8PTCURVE	12/27/2006 10:59:45 AM	100.0	2724-WC-40-10
8	ICV	AS14A METHODHIGH 8PTCURVE	12/27/2006 11:18:16 AM	100.0	2724-WC-12-5
9	DCV	AS14A METHODHIGH 8PTCURVE	12/27/2006 11:36:46 AM	100.0	2724-WC-12-5
10	ICB	AS14A METHODHIGH 8PTCURVE	12/27/2006 11:54:16 AM	100.0	
11	JL447 2X G6L260116-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 12:11:46 PM	100.0	
12	JL447 10X G6L260116-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 12:29:16 PM	100.0	
13	JL447 S 2X G6L260116-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 12:46:46 PM	100.0	2724-WC-40-10
14	JL447 D 2X G6L260116-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 1:04:16 PM	100.0	2724-WC-40-10
15	JL447 S 20X G6L260116-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 1:21:48 PM	100.0	2724-WC-40-10
16	JL447 D 20X G6L260116-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 1:40:18 PM	100.0	2724-WC-40-10
17	JL45A 5X G6L260116-2	AS14A METHODHIGH 8PTCURVE	12/27/2006 1:58:48 PM	100.0	
18	JL45A 50X G6L260116-2	AS14A METHODHIGH 8PTCURVE	12/27/2006 2:17:18 PM	100.0	
19	JL45C 1X G6L260116-3	AS14A METHODHIGH 8PTCURVE	12/27/2006 2:35:48 PM	100.0	
20	JL0C3 10X G6L210203-3	AS14A METHODHIGH 8PTCURVE	12/27/2006 2:54:18 PM	100.0	
21	CCV	AS14A METHODHIGH 8PTCURVE	12/27/2006 3:12:48 PM	100.0	2724-WC-40-7
22	CCB	AS14A METHODHIGH 8PTCURVE	12/27/2006 3:31:18 PM	100.0	
23	JL0DA 5X G6L210203-4	AS14A METHODHIGH 8PTCURVE	12/27/2006 3:49:49 PM	100.0	
24	JLW48 1X G6L200335-11	AS14A METHODHIGH 8PTCURVE	12/27/2006 4:08:19 PM	100.0	
25	JLVQR 1X G6L200192-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 4:26:49 PM	100.0	
26	JLVQW 1X G6L200192-2	AS14A METHODHIGH 8PTCURVE	12/27/2006 4:45:19 PM	100.0	
27	JLVQ1 1X G6L200192-3	AS14A METHODHIGH 8PTCURVE	12/27/2006 5:03:49 PM	100.0	
28	JLVQ3 1X G6L200192-4	AS14A METHODHIGH 8PTCURVE	12/27/2006 5:22:20 PM	100.0	
29	JLVQ4 1X G6L200192-5	AS14A METHODHIGH 8PTCURVE	12/27/2006 5:40:50 PM	100.0	
30	JLVRA 1X G6L200196-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 5:59:20 PM	100.0	
31	JLVRF 1X G6L200196-2	AS14A METHODHIGH 8PTCURVE	12/27/2006 6:17:50 PM	100.0	
32	JLVRL 1X G6L200196-3	AS14A METHODHIGH 8PTCURVE	12/27/2006 6:36:20 PM	100.0	
33	CCV	AS14A METHODHIGH 8PTCURVE	12/27/2006 6:54:50 PM	100.0	2724-WC-40-7
34	CCB	AS14A METHODHIGH 8PTCURVE	12/27/2006 7:13:20 PM	100.0	
35	JLVRN 1X G6L200196-4	AS14A METHODHIGH 8PTCURVE	12/27/2006 7:31:51 PM	100.0	
36	JLVRQ 1X G6L200196-5	AS14A METHODHIGH 8PTCURVE	12/27/2006 7:50:21 PM	100.0	
37	JLVVG 1X G6L200199-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 8:08:51 PM	100.0	
38	JLVVJ 1X G6L200199-2	AS14A METHODHIGH 8PTCURVE	12/27/2006 8:27:21 PM	100.0	
39	JLVVK 1X G6L200199-3	AS14A METHODHIGH 8PTCURVE	12/27/2006 8:45:52 PM	100.0	
40	JLVVL 1X G6L200199-4	AS14A METHODHIGH 8PTCURVE	12/27/2006 9:04:22 PM	100.0	

Title: AS14A 013004

Datasource: D4N34341\_local  
Location: ICS1000\SEQUENCES\2006\DECEMBER 2006  
Timebase: ICS1000  
#Samples: 51

Created: 12/26/2006 4:21:47 PM by ounis  
Last Update: 12/28/2006 2:54:16 PM by ounis

No.	Name	Comment	Weight
1	BLANK	OUNI SONIA	1.0000
2	1R	OUNI SONIA	1.0000
3	2R	OUNI SONIA	1.0000
4	3R	OUNI SONIA	1.0000
5	4R	OUNI SONIA	1.0000
6	5R	OUNI SONIA	1.0000
7	6R	OUNI SONIA	1.0000
8	ICV	OUNI SONIA	1.0000
9	DCV	OUNI SONIA	1.0000
10	ICE	OUNI SONIA	1.0000
11	JL447 2X G6L260116-1	OUNI SONIA	1.0000
12	JL447 10X G6L260116-1	OUNI SONIA	1.0000
13	JL447 S 2X G6L260116-1	OUNI SONIA	1.0000
14	JL447 D 2X G6L260116-1	OUNI SONIA	1.0000
15	JL447 S 20X G6L260116-1	OUNI SONIA	1.0000
16	JL447 D 20X G6L260116-1	OUNI SONIA	1.0000
17	JL45A 5X G6L260116-2	OUNI SONIA	1.0000
18	JL45A 50X G6L260116-2	OUNI SONIA	1.0000
19	JL45C 1X G6L260116-3	OUNI SONIA	1.0000
20	JL0C3 10X G6L210203-3	OUNI SONIA	1.0000
21	CCV	OUNI SONIA	1.0000
22	CCB	OUNI SONIA	1.0000
23	JL0DA 5X G6L210203-4	OUNI SONIA	1.0000
24	JLVW48 1X G6L200335-11	OUNI SONIA	1.0000
25	JLVQR 1X G6L200192-1	OUNI SONIA	1.0000
26	JLVQW 1X G6L200192-2	OUNI SONIA	1.0000
27	JLVQ1 1X G6L200192-3	OUNI SONIA	1.0000
28	JLVQ3 1X G6L200192-4	OUNI SONIA	1.0000
29	JLVQ4 1X G6L200192-5	OUNI SONIA	1.0000
30	JLVRA 1X G6L200196-1	OUNI SONIA	1.0000
31	JLVRF 1X G6L200196-2	OUNI SONIA	1.0000
32	JLVRL 1X G6L200196-3	OUNI SONIA	1.0000
33	CCV	OUNI SONIA	1.0000
34	CCB	OUNI SONIA	1.0000
35	JLVRN 1X G6L200196-4	OUNI SONIA	1.0000
36	JLVRQ 1X G6L200196-5	OUNI SONIA	1.0000
37	JLVVG 1X G6L200199-1	OUNI SONIA	1.0000
38	JLVVJ 1X G6L200199-2	OUNI SONIA	1.0000
39	JLVVK 1X G6L200199-3	OUNI SONIA	1.0000
40	JLVVL 1X G6L200199-4	OUNI SONIA	1.0000

Sequence: 061227A  
Operator: ounis

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Printed: 12/28/2006 2:54:39 PM

Title: AS14A 013004

Datasource: D4N34341\_local  
Location: ICS1000\SEQUENCES\2006\DECEMBER 2006  
Timebase: ICS1000  
#Samples: 51

Created: 12/26/2006 4:21:47 PM by ounis  
Last Update: 12/28/2006 2:54:16 PM by ounis

No.	Name	Dil. Factor	Type	F [ppm] Fluoride	CL [ppm] Chloride	NO2 [ppm] Nitrite	Br [ppm] Bromide	NO3 [ppm] Nitrate	PO4 [ppm] Phosphate
41	JLVVM 1X G6L200199-5 <i>sc4</i>	1.0000	Unknown	0.237	0.885	n.a.	n.a.	1.554	0.721
42	MB	1.0000	Unknown	0.119	n.a.	n.a.	n.a.	n.a.	0.451
43	LCS	1.0000	Unknown	4.761	9.541	1.015	4.849	1.017	5.228
44	DCS	1.0000	Unknown	4.758	9.550	1.009	4.865	0.979	5.202
45	CCV	1.0000	Unknown	24.572	50.756	5.026	24.966	4.992	24.729
46	CCB	1.0000	Unknown	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
47	JL447 20X G6L260116-1 <i>c</i>	20.0000	Unknown	n.a.	1156.573	n.a.	n.a.	n.a.	n.a.
48	JL45A 100X G6L260116-2 <i>sc4</i>	100.0000	Unknown	n.a.	127.086	n.a.	n.a.	n.a.	n.a.
49	CCV	1.0000	Unknown	24.434	50.784	5.009	24.912	4.982	24.652
50	CCB	1.0000	Unknown	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
51	SHUTDOWN	1.0000	Unknown	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum			478.860	8433.631	93.422	515.445	111.484	488.001

Sequence: 061227A  
Operator: ounis

Page 6 of 8  
Printed: 12/28/2006 2:54:39 PM

Title: AS14A 013004

Datasource: D4N34341\_local  
Location: ICS1000\SEQUENCES\2006\DECEMBER 2006  
Timebase: ICS1000  
#Samples: 51

Created: 12/26/2006 4:21:47 PM by ounis  
Last Update: 12/28/2006 2:54:16 PM by ounis

No.	Name	SO4 [ppm] Sulfate	Status	Program
41	JLVVM 1X G6L200199-5	3.147	Finished	AS14A PROGRAM
42	MB	0.098	Finished	AS14A PROGRAM
43	LCS	9.768	Finished	AS14A PROGRAM
44	DCS	9.835	Finished	AS14A PROGRAM
45	CCV	49.823	Finished	AS14A PROGRAM
46	CCB	n.a.	Finished	AS14A PROGRAM
47	JL447 20X G6L260116-1	n.a.	Finished	AS14A PROGRAM
48	JL45A 100X G6L260116-2	5958.708	Finished	AS14A PROGRAM
49	CCV	49.995	Finished	AS14A PROGRAM
50	CCB	n.a.	Finished	AS14A PROGRAM
51	SHUTDOWN	n.a.	Finished	ICS1000 SHUTDOWN PROGRAM
	Sum	17473.184		

Sequence: 061227A  
Operator: ounis

Page 7 of 8  
Printed: 12/28/2006 2:54:39 PM

Title: AS14A 013004

Datasource: D4N34341\_local  
Location: ICS1000\SEQUENCES\2006\DECEMBER 2006  
Timebase: ICS1000  
#Samples: 51

Created: 12/26/2006 4:21:47 PM by ounis  
Last Update: 12/28/2006 2:54:16 PM by ounis

No.	Name	Method	Inj. Date/Time	Inj. Vol.	Sample ID
41	JLVVM 1X G6L200199-5	AS14A METHODHIGH 8PTCURVE	12/27/2006 9:22:52 PM	100.0	
42	MB	AS14A METHODHIGH 8PTCURVE	12/27/2006 9:41:22 PM	100.0	
43	LCS	AS14A METHODHIGH 8PTCURVE	12/27/2006 9:59:53 PM	100.0	2724-WC-40-10
44	DCS	AS14A METHODHIGH 8PTCURVE	12/27/2006 10:18:23 PM	100.0	2724-WC-40-10
45	CCV	AS14A METHODHIGH 8PTCURVE	12/27/2006 10:36:53 PM	100.0	2724-WC-40-7
46	CCB	AS14A METHODHIGH 8PTCURVE	12/27/2006 10:55:24 PM	100.0	
47	JL447 20X G6L260116-1	AS14A METHODHIGH 8PTCURVE	12/27/2006 11:13:53 PM	100.0	
48	JL45A 100X G6L260116-2	AS14A METHODHIGH 8PTCURVE	12/27/2006 11:32:24 PM	100.0	
49	CCV	AS14A METHODHIGH 8PTCURVE	12/27/2006 11:50:54 PM	100.0	2724-WC-40-7
50	CCB	AS14A METHODHIGH 8PTCURVE	12/28/2006 12:09:24 AM	100.0	
51	SHUTDOWN	AS14A METHODHIGH 8PTCURVE	12/28/2006 12:27:54 AM	100.0	
	Sum				

Sequence: 061227A  
Operator: ounis

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Printed: 12/28/2006 2:54:39 PM

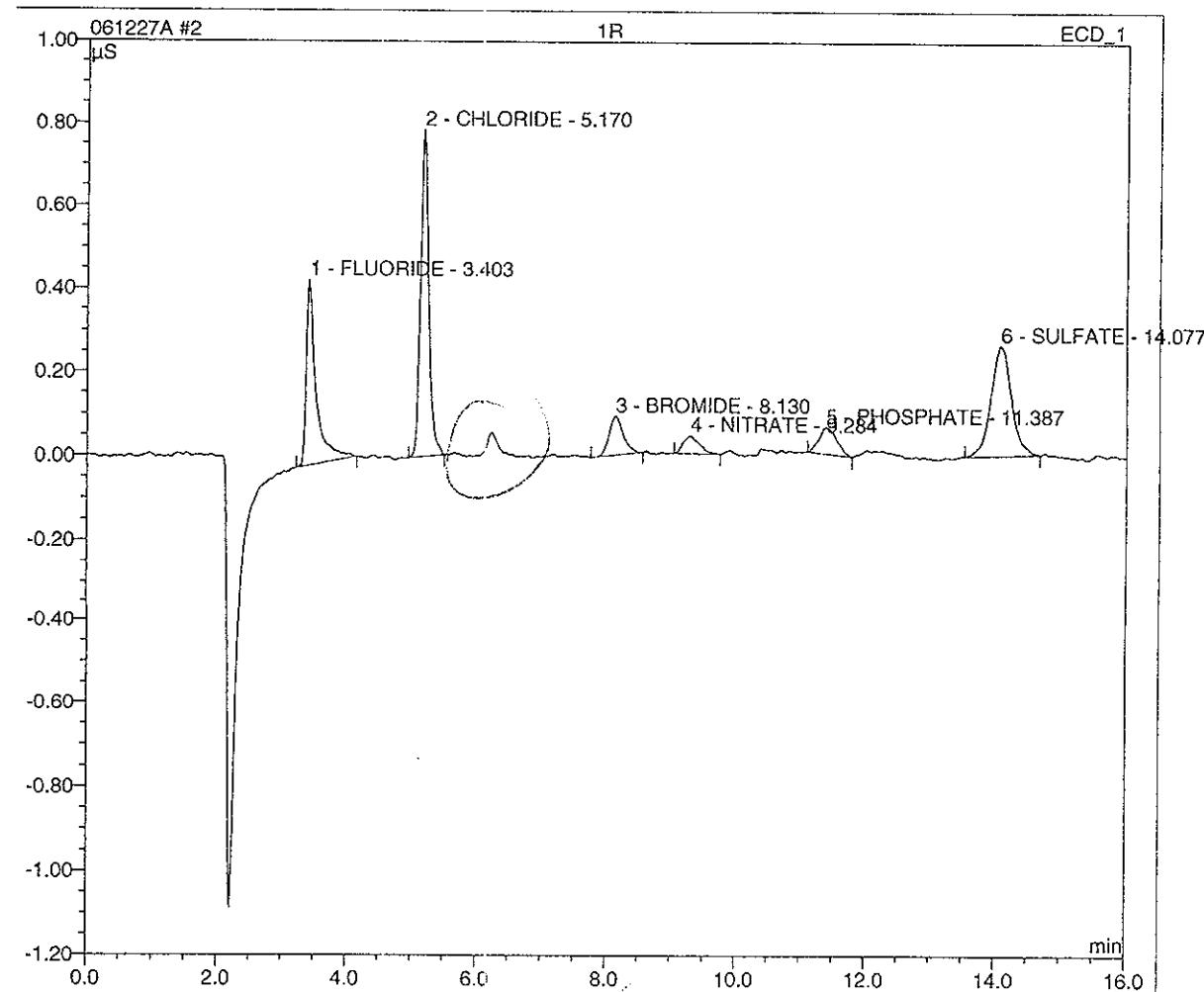
Title: AS14A 013004  
Datasource: D4N34341\_local  
Location: ICS1000\SEQUENCES\2006\DECEMBER 2006  
Timebase: ICS1000  
#Samples: 51

Created: 12/26/2006 4:21:47 PM by ounis  
Last Update: 12/28/2006 2:54:16 PM by ounis

No.	Name	Comment	Weight
41	JLVVM 1X G6L200199-5	OUNI SONIA	1.0000
42	MB	OUNI SONIA	1.0000
43	LCS	OUNI SONIA	1.0000
44	DCS	OUNI SONIA	1.0000
45	CCV	OUNI SONIA	1.0000
46	CCB	OUNI SONIA	1.0000
47	JL447 20X G6L260116-1	OUNI SONIA	1.0000
48	JL45A 100X G6L260116-2	OUNI SONIA	1.0000
49	CCV	OUNI SONIA	1.0000
50	CCB	OUNI SONIA	1.0000
51	SHUTDOWN	OUNI SONIA	1.0000
	Sum		

Sample Name:	1R	Inj. Vol.:	100.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 09:27	Run Time:	16.00

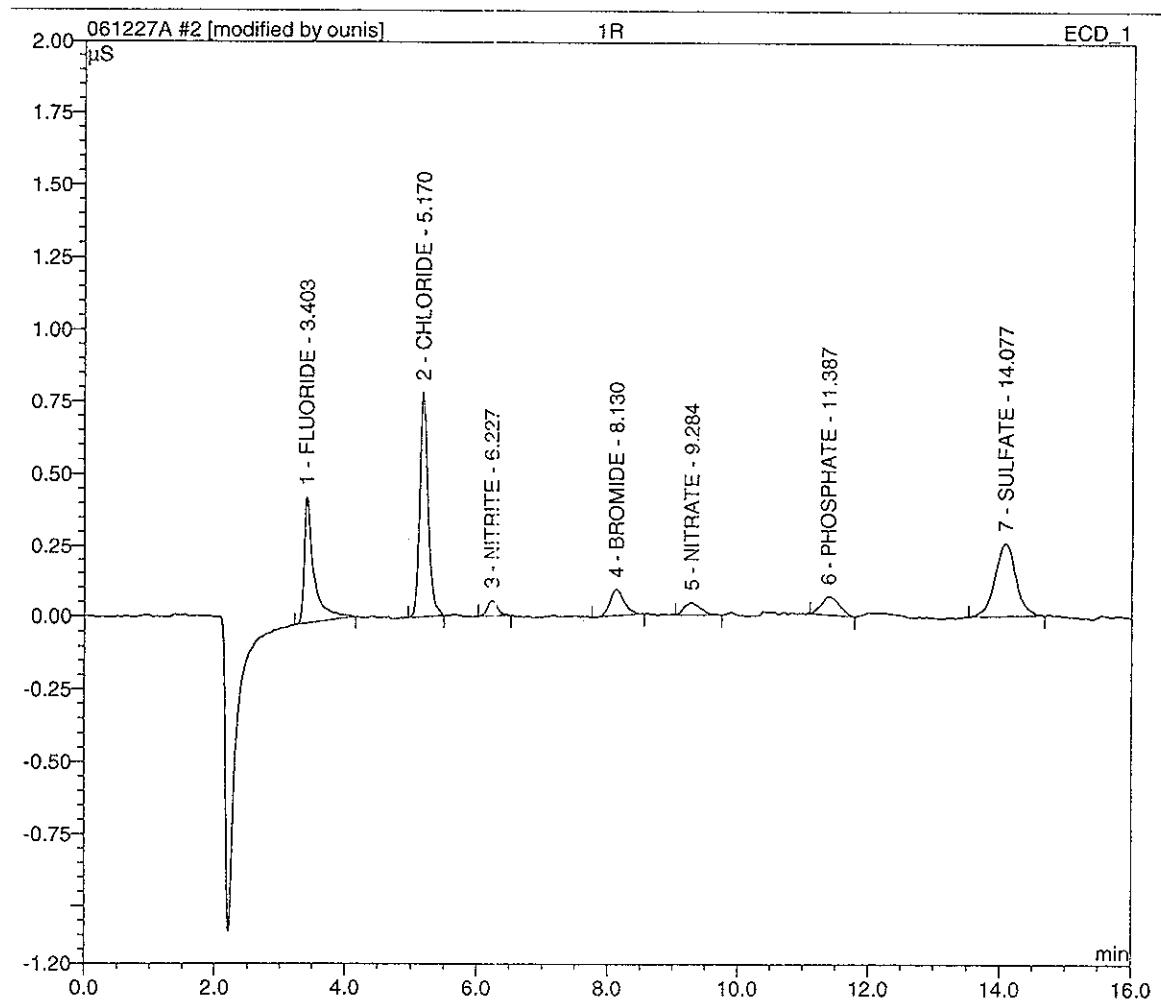
No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.40	FLUORIDE	BMB	0.077	0.443	0.5108
2	5.17	CHLORIDE	BMB	0.114	0.785	0.9792
3	8.13	BROMIDE	BMB	0.023	0.092	0.4914
4	9.28	NITRATE	BMB	0.012	0.043	0.0499
5	11.39	PHOSPHATE	BMB	0.020	0.063	0.2032
6	14.08	SULFATE	BMB	0.096	0.263	1.0356
TOTAL:				0.34	1.69	3.27



506  
1.3.07

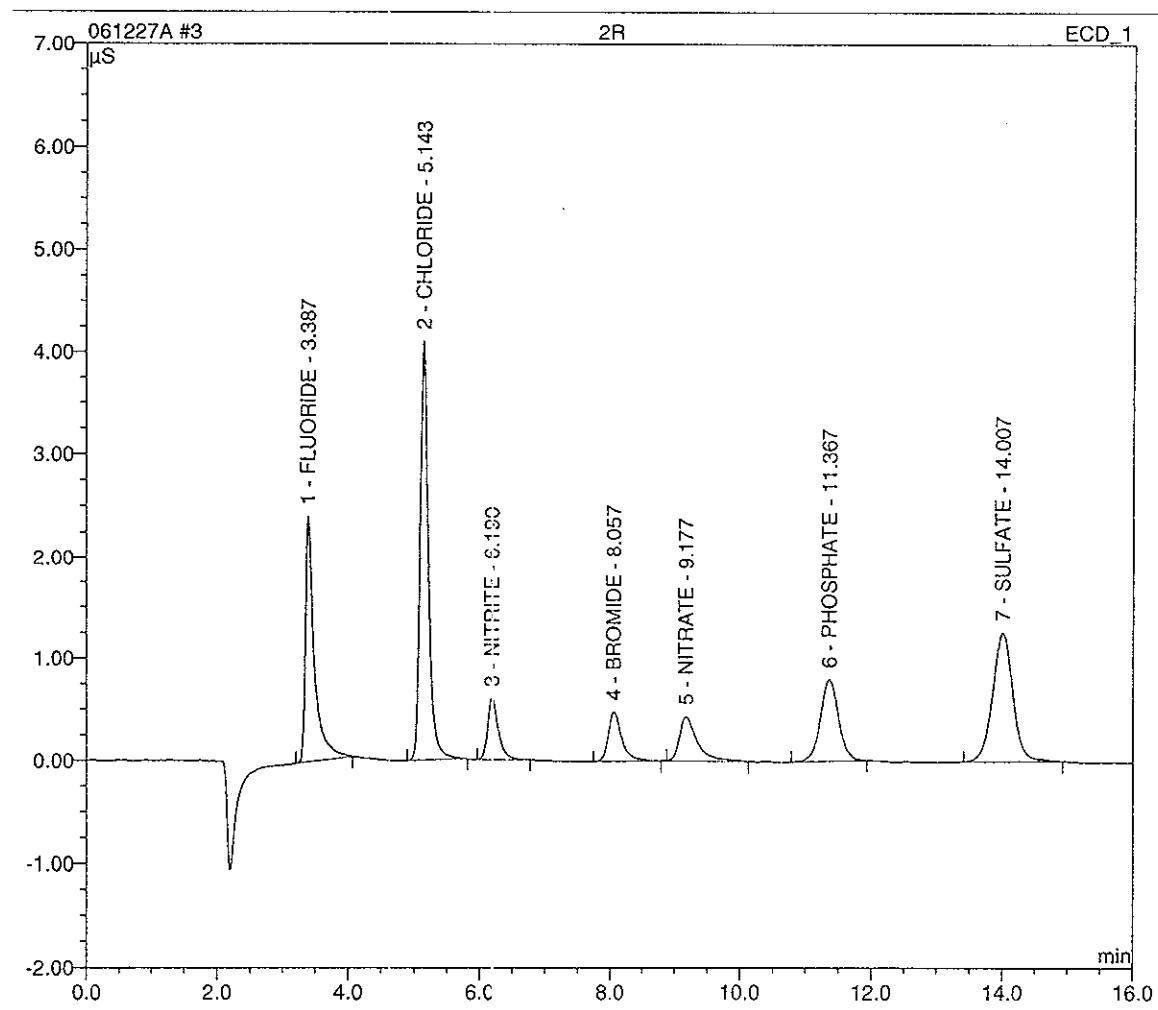
Sample Name:	1R	Inj. Vol.:	100.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 09:27	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.40	FLUORIDE	BMB	0.077	0.443	0.5108
2	5.17	CHLORIDE	BMB	0.114	0.785	0.9792
3	6.23	NITRITE	BMB*	0.010	0.054	0.0501
4	8.13	BROMIDE	BMB	0.023	0.092	0.4914
5	9.28	NITRATE	BMB	0.012	0.043	0.0499
6	11.39	PHOSPHATE	BMB	0.020	0.063	0.2032
7	14.08	SULFATE	BMB	0.096	0.263	1.0356
TOTAL:				0.35	1.74	3.32



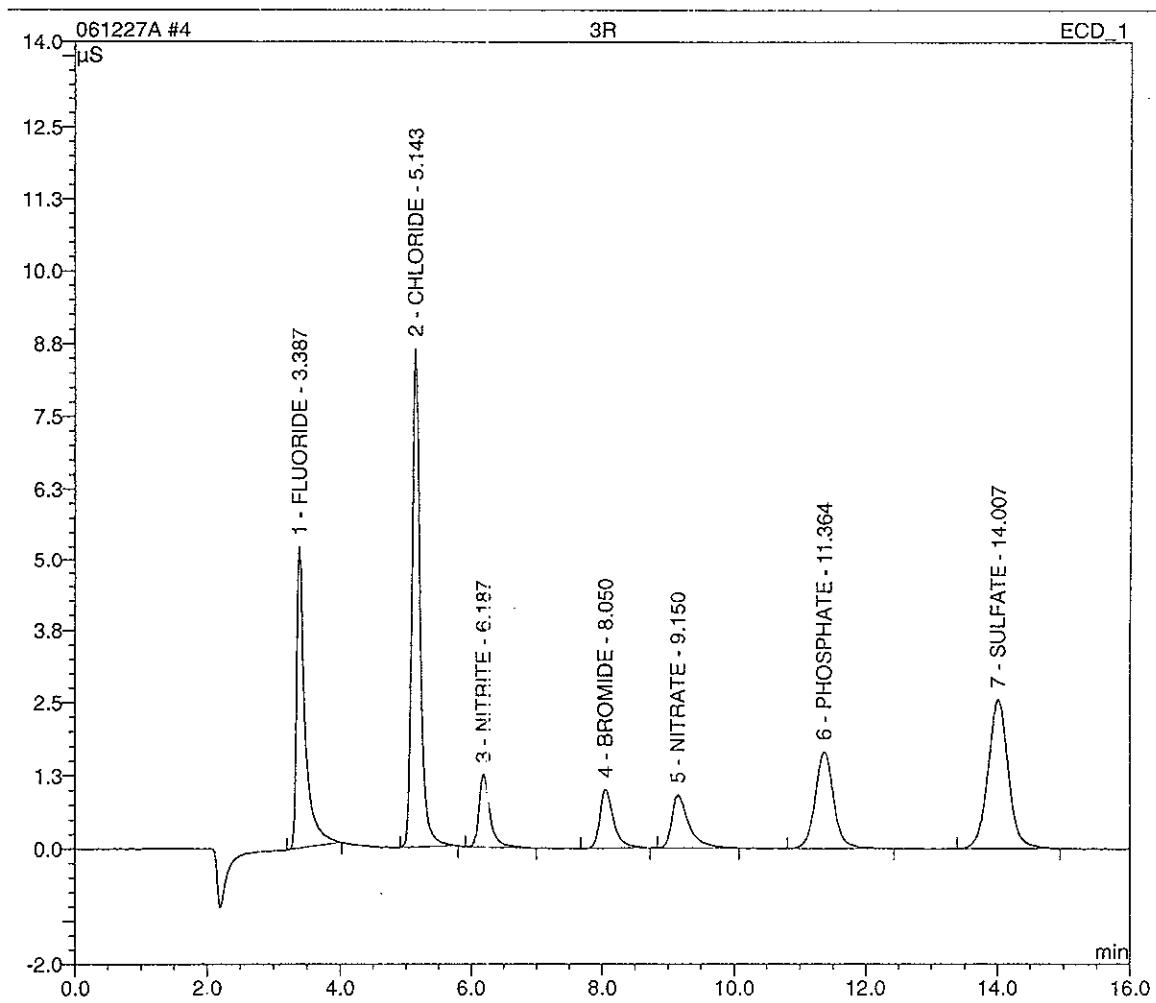
Sample Name:	2R	Inj. Vol.:	100.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 09:45	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}^{\cdot}\text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	0.375	2.409	2.4223
2	5.14	CHLORIDE	BMB	0.602	4.100	4.7445
3	6.19	NITRITE	BMB	0.116	0.597	0.4843
4	8.06	BROMIDE	BMB	0.121	0.481	2.4602
5	9.18	NITRATE	BMB	0.138	0.430	0.4990
6	11.37	PHOSPHATE	BMB	0.255	0.797	2.3872
7	14.01	SULFATE	BMB	0.452	1.259	4.9556
TOTAL:				2.06	10.07	17.95



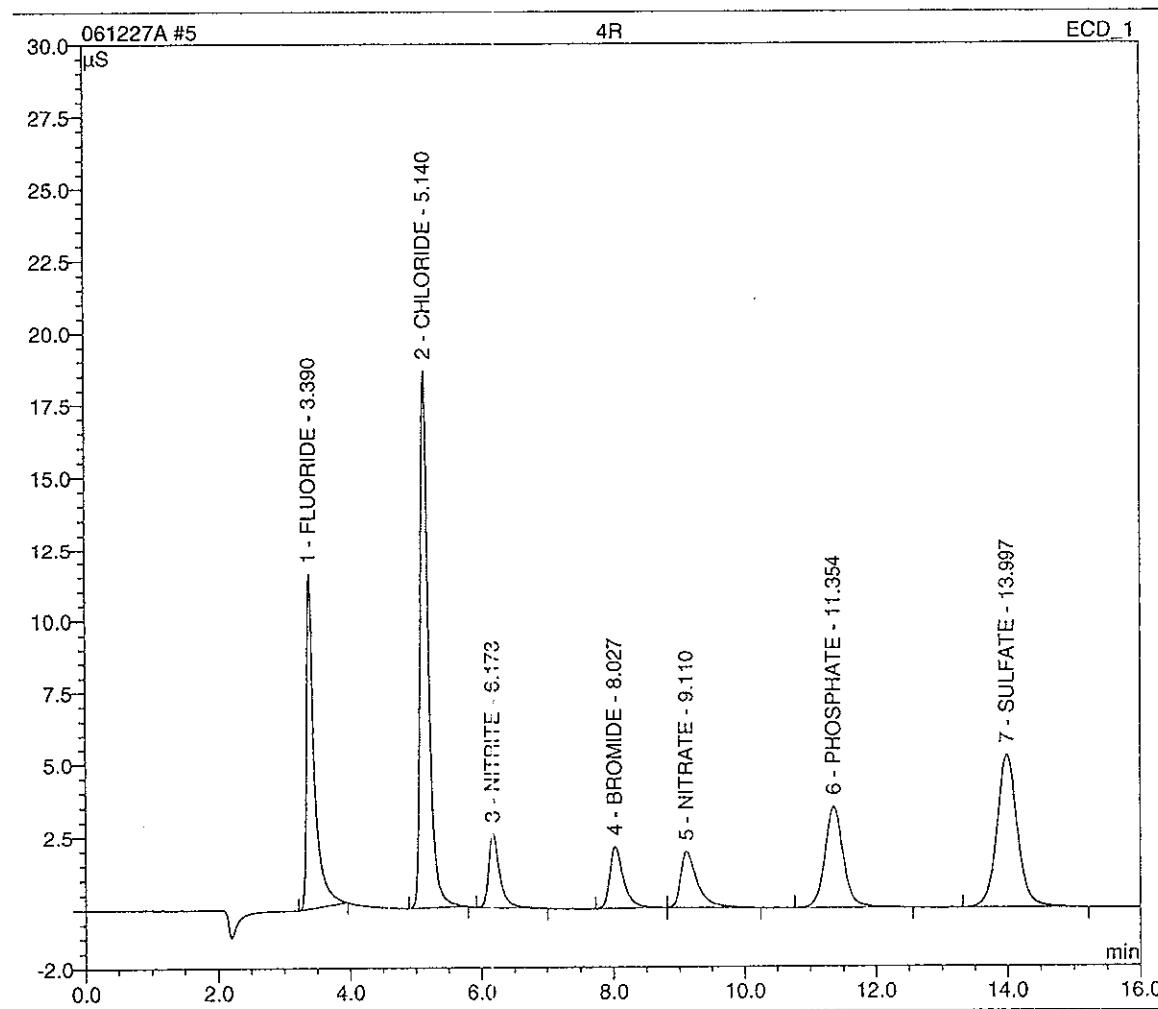
Sample Name:	3R	Inj. Vol.:	100.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 10:04	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	0.769	5.232	4.9219
2	5.14	CHLORIDE	BMB	1.256	8.637	9.6677
3	6.19	NITRITE	BMB	0.247	1.241	1.0179
4	8.05	BROMIDE	BMB	0.249	1.009	5.0105
5	9.15	NITRATE	BMB	0.277	0.907	0.9888
6	11.36	PHOSPHATE	BMB	0.544	1.653	5.0260
7	14.01	SULFATE	BMB	0.916	2.552	9.9891
TOTAL:				4.26	21.23	36.62



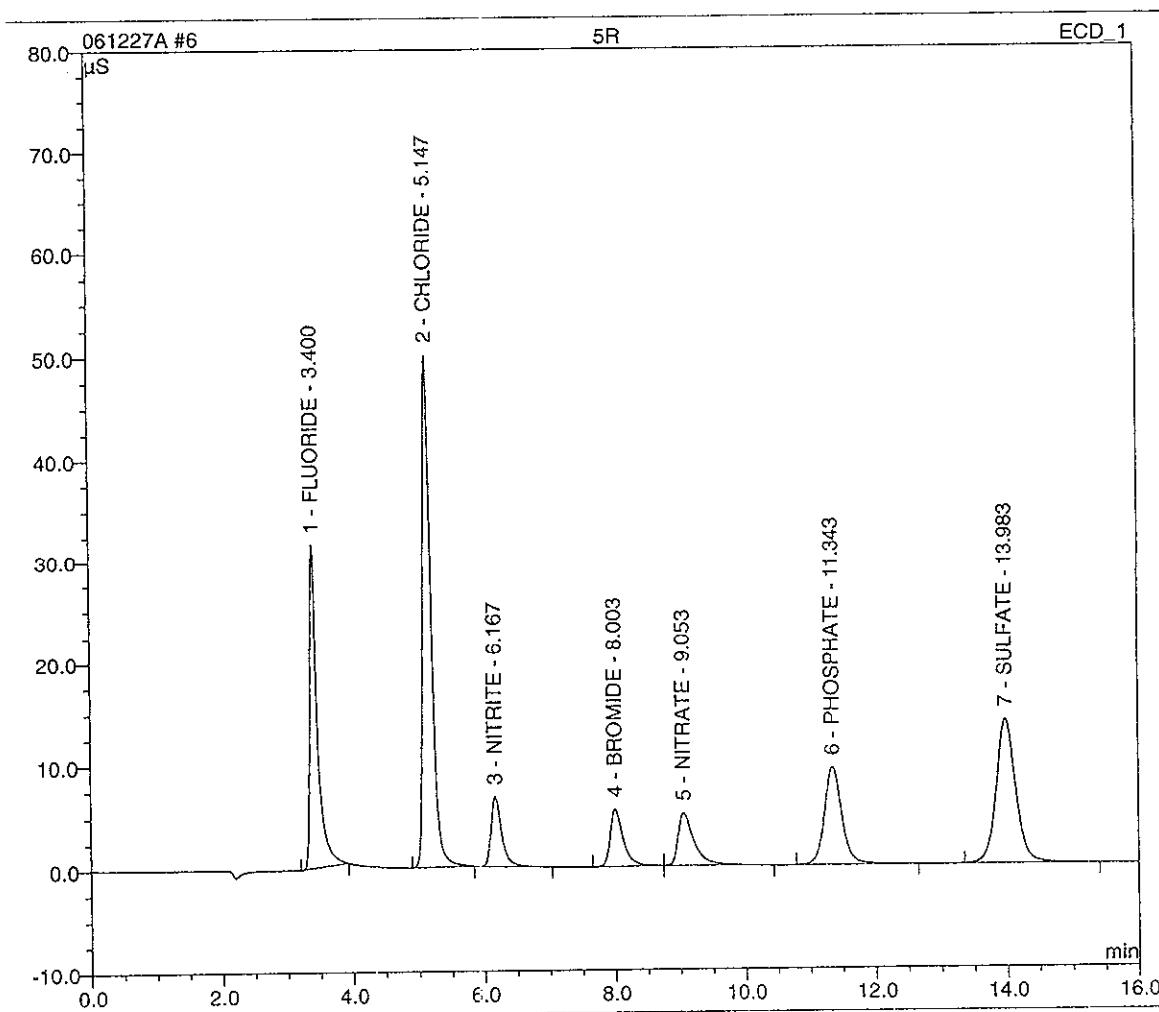
Sample Name:	4R	Inj. Vol.:	100.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 10:22	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}^{\cdot}\text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	1.587	11.548	10.0267
2	5.14	CHLORIDE	BMB	2.692	18.612	20.0222
3	6.17	NITRITE	BMB	0.493	2.524	2.0043
4	8.03	BROMIDE	BMb	0.511	2.106	10.1484
5	9.11	NITRATE	bMB	0.574	1.903	2.0233
6	11.35	PHOSPHATE	BMB	1.121	3.456	10.1268
7	14.00	SULFATE	BMB	1.882	5.243	20.2167
TOTAL:				8.86	45.39	74.57



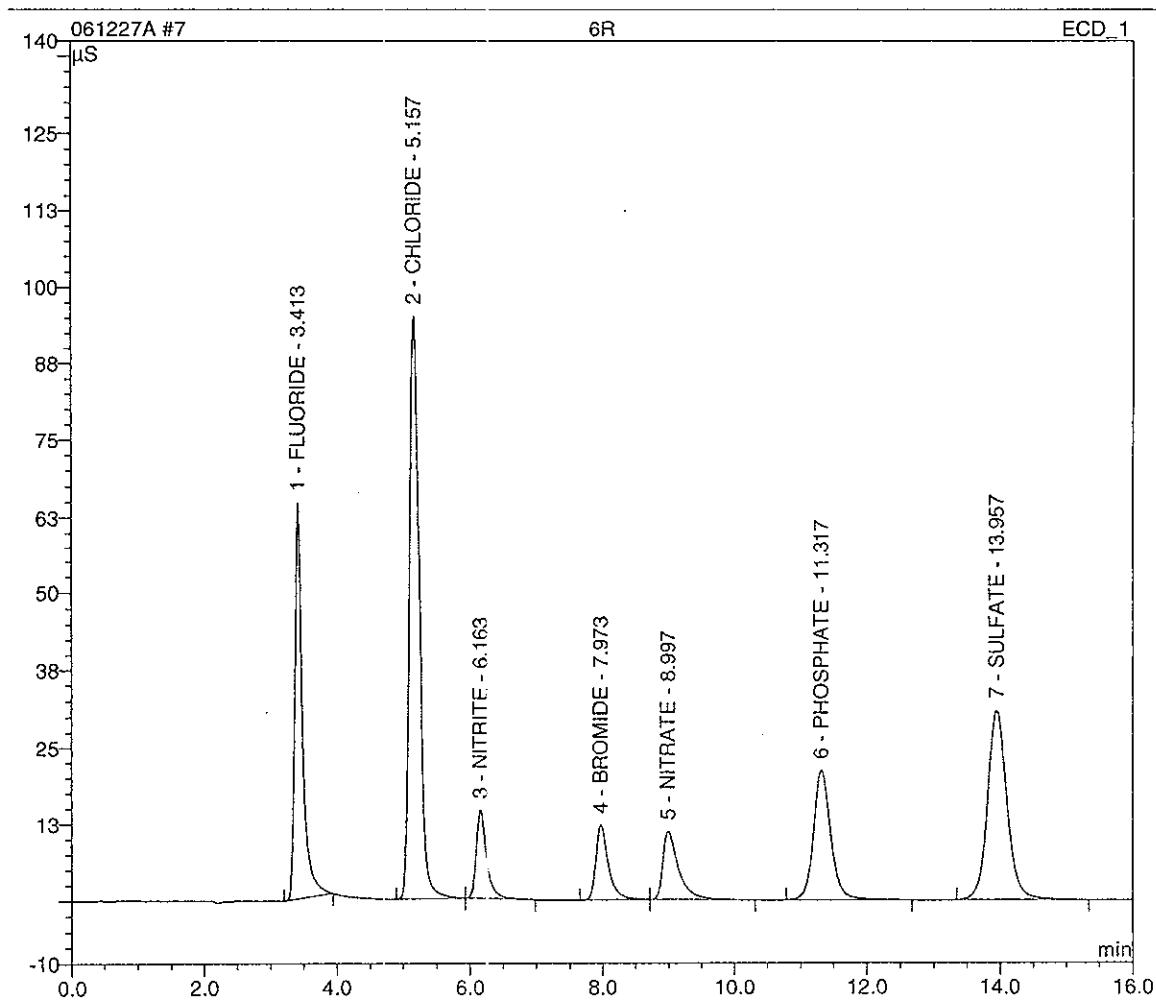
Sample Name:	5R	Inj. Vol.:	100.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 10:41	Run Time:	16.00

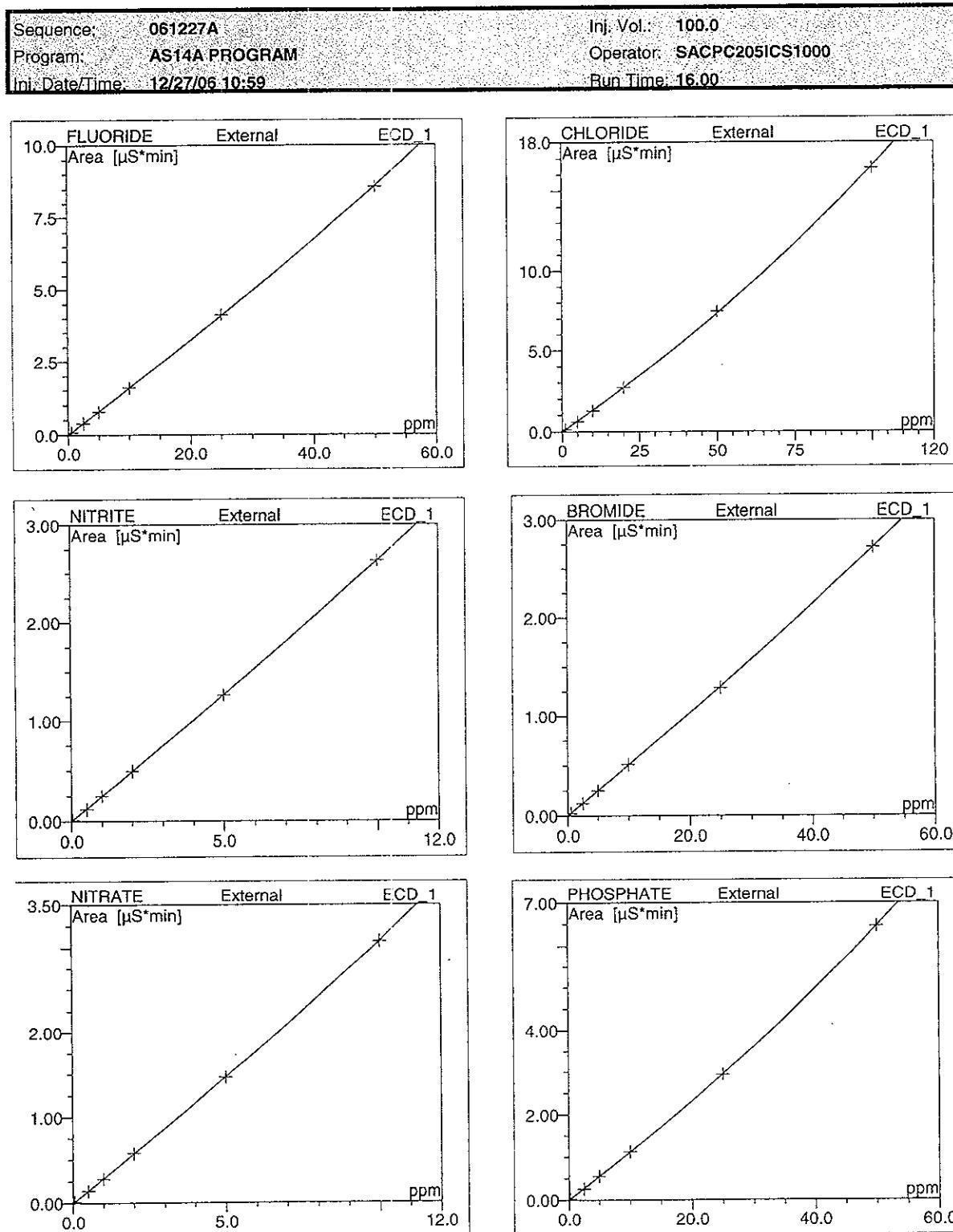
No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.40	FLUORIDE	BMB	4.121	31.606	25.2047
2	5.15	CHLORIDE	BMB	7.444	49.930	50.8748
3	6.17	NITRITE	BMB	1.261	6.722	4.9908
4	8.00	BROMIDE	BMb	1.288	5.553	24.8426
5	9.05	NITRATE	bMB	1.459	5.067	4.9853
6	11.34	PHOSPHATE	BMB	2.932	9.362	24.9534
7	13.98	SULFATE	BMB	4.846	13.933	49.7133
TOTAL:				23.35	122.17	185.56



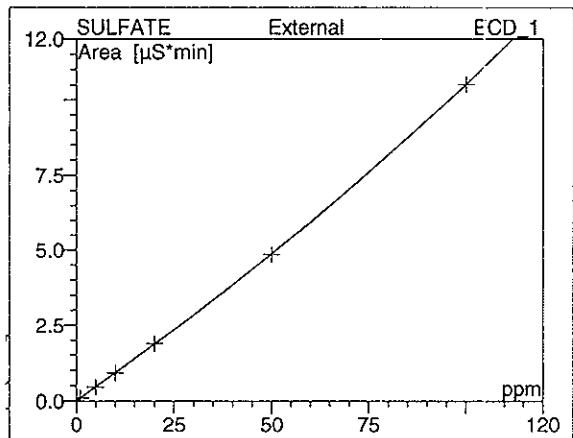
Sample Name:	6R	Inj. Vol.:	100.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 10:59	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.41	FLUORIDE	BMB	8.574	64.536	49.9118
2	5.16	CHLORIDE	BMb	16.412	95.014	99.6700
3	6.16	NITRITE	bMB	2.628	14.397	10.0026
4	7.97	BROMIDE	BMb	2.717	12.203	50.0473
5	9.00	NITRATE	bMB	3.074	11.113	10.0037
6	11.32	PHOSPHATE	BMB	6.445	21.157	50.0026
7	13.96	SULFATE	BMB	10.515	30.845	100.0929
TOTAL:				50.37	249.26	369.73



**Calibration Batch Report**

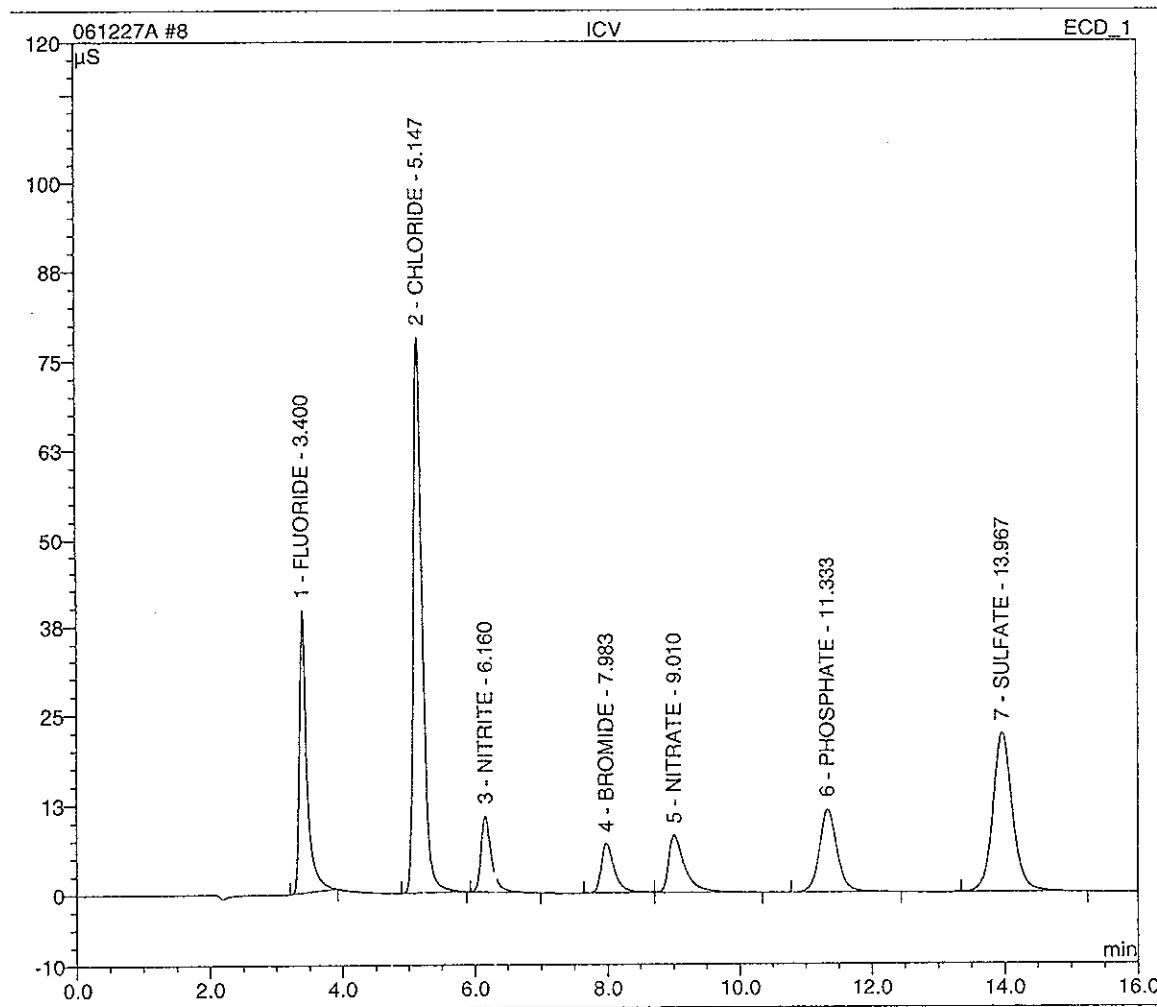
Sequence:	061227A	Inj. Vol.:	100.0
Program:	AS14A PROGRAM	Operator:	n.a.
Init. Date/Time:	12/27/06 10:59	Run Time:	16.00



No.	Ret. Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.41	FLUORIDE	X0QOff	6	-0.002	0.155	0.000	99.944
2	5.16	CHLORIDE	X0QOff	6	-0.011	0.128	0.000	99.699
3	6.16	NITRITE	X0QOff	6	-0.003	0.243	0.002	99.965
4	7.97	BROMIDE	X0QOff	6	-0.001	0.049	0.000	99.955
5	9.00	NITRATE	X0QOff	6	-0.002	0.279	0.003	99.947
6	11.32	PHOSPHATE	X0QOff	6	-0.001	0.106	0.000	99.802
7	13.96	SULFATE	X0QOff	6	0.003	0.090	0.000	99.872
AVERAGE:					-0.0025	0.1501	0.0009	99.8835

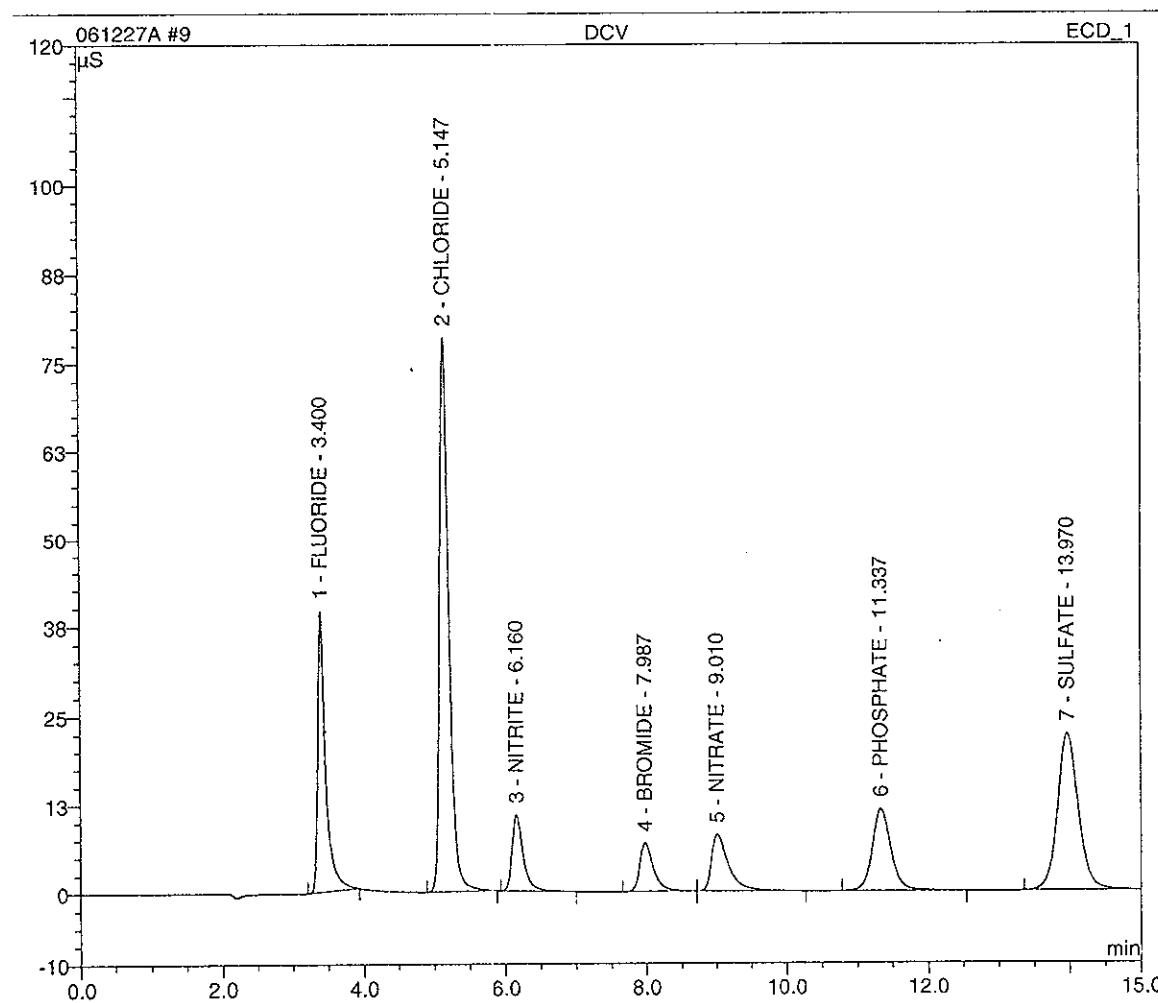
Sample Name:	ICV	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 11:18	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.40	FLUORIDE	BMB	5.098	39.456	30.8220
2	5.15	CHLORIDE	BMB	12.001	78.081	$10^{-2}$ 76.8751
3	6.16	NITRITE	BMB	1.969	10.660	7.6321
4	7.98	BROMIDE	BMB	1.584	6.903	30.2417
5	9.01	NITRATE	bMB	2.261	8.009	$10^{-2}$ 7.5317
6	11.33	PHOSPHATE	BMB	3.594	11.586	30.0020
7	13.97	SULFATE	BMB	7.632	22.208	$10^{-2}$ 75.3186
TOTAL:				34.14	176.90	258.42



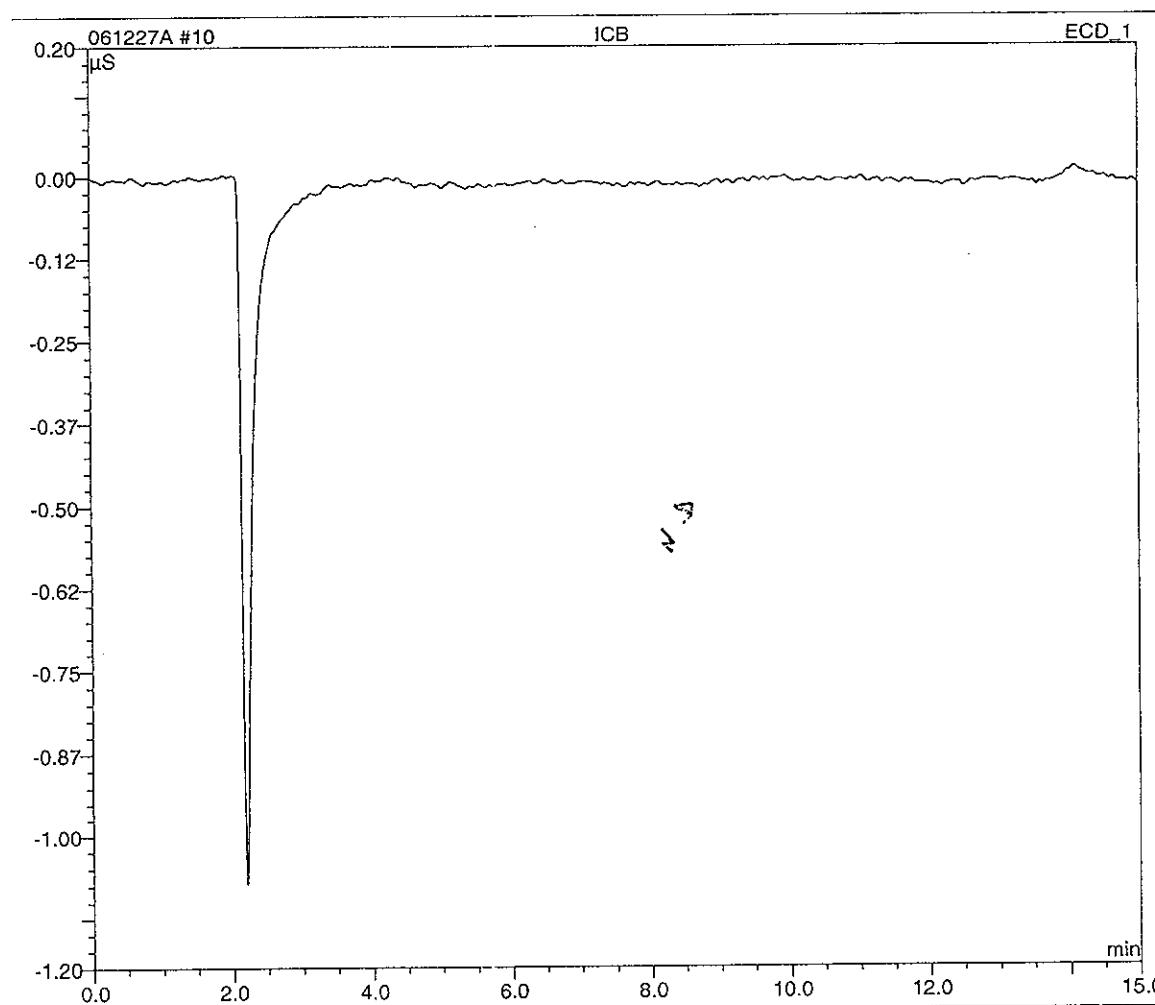
Sample Name:	DCV	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 11:36	Run Time:	15.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}/\text{min}$	Height $\mu\text{S}$	%, Amount ppm
1	3.40	FLUORIDE	BMB	5.124	39.461	30.9689
2	5.15	CHLORIDE	BMB	12.027	78.447	$10^3$ 77.0155
3	6.16	NITRITE	BMB	1.997	10.825	7.7335
4	7.99	BROMIDE	BMb	1.579	6.916	30.1606
5	9.01	NITRATE	bMB	2.252	8.033	7.5056
6	11.34	PHOSPHATE	BMB	3.592	11.628	29.9896
7	13.97	SULFATE	BMB	7.591	22.267	74.9570
TOTAL:				34.16	177.58	258.33



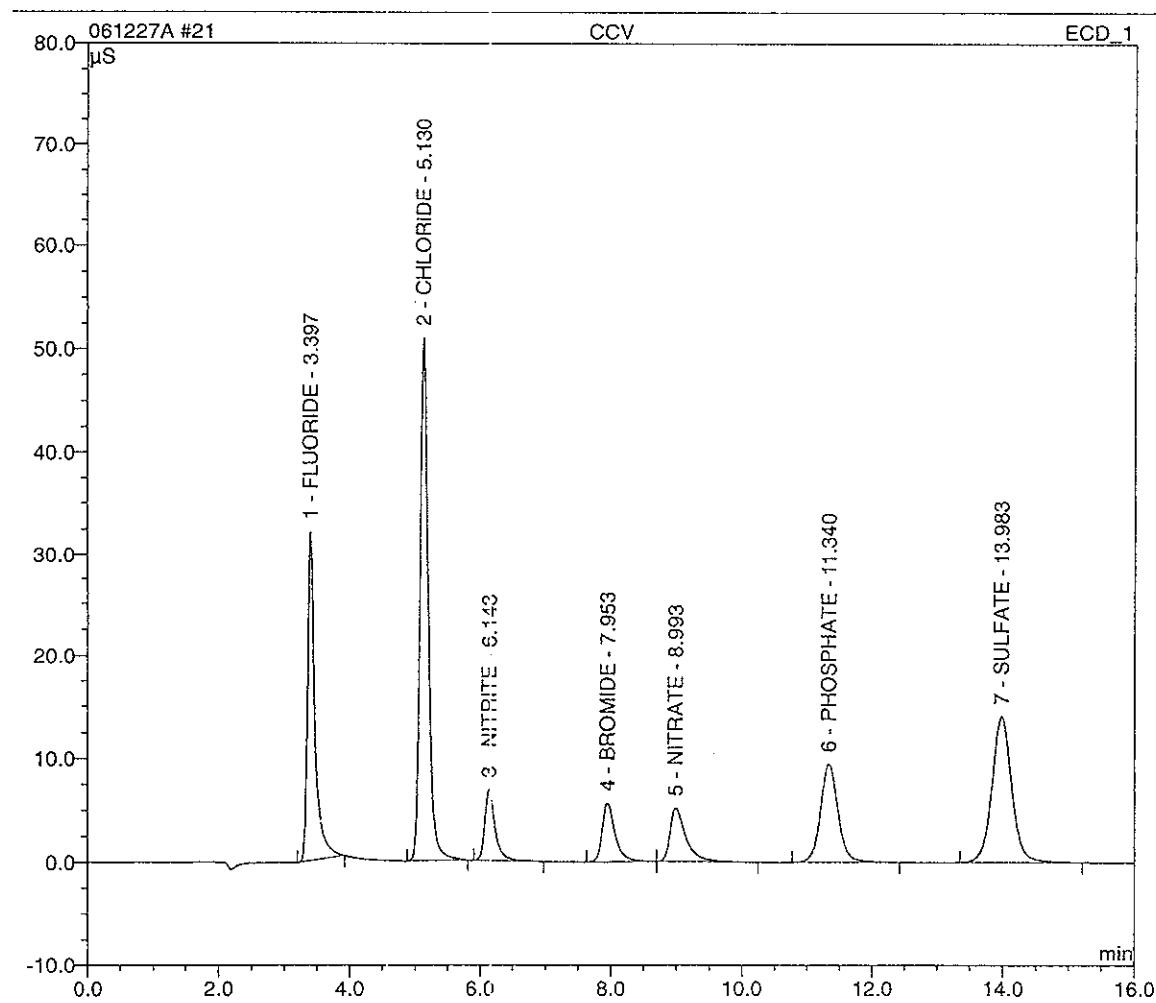
Sample Name:	ICB	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 11:54	Run Time:	15.00

No.	Time min	Peak Name	Type	Area μS*min	Height μS	Amount ppm
		TOTAL:		0.00	0.00	0.00



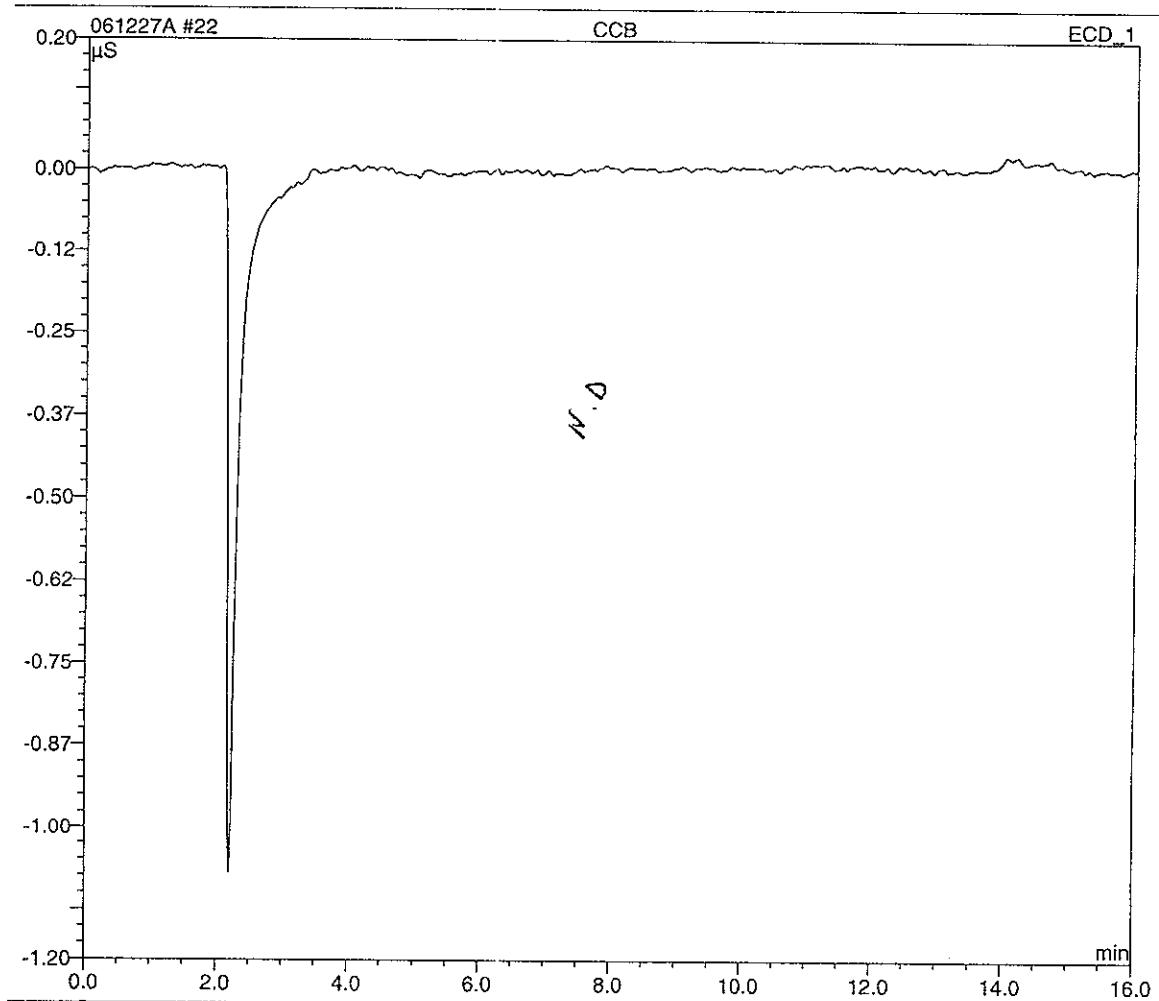
Sample Name:	CCV	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 15:12	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.40	FLUORIDE	BMB	4.153	32.051	25.3926
2	5.13	CHLORIDE	BMB	7.497	50.934	51.1996
3	6.14	NITRITE	BMB	1.274	6.840	5.0401
4	7.95	BROMIDE	BMb	1.301	5.653	25.0789
5	8.99	NITRATE	bMB	1.462	5.163	4.9935
6	11.34	PHOSPHATE	BMB	2.944	9.454	25.0485
7	13.98	SULFATE	BMB	4.879	14.037	50.0321
TOTAL:				23.51	124.13	186.79



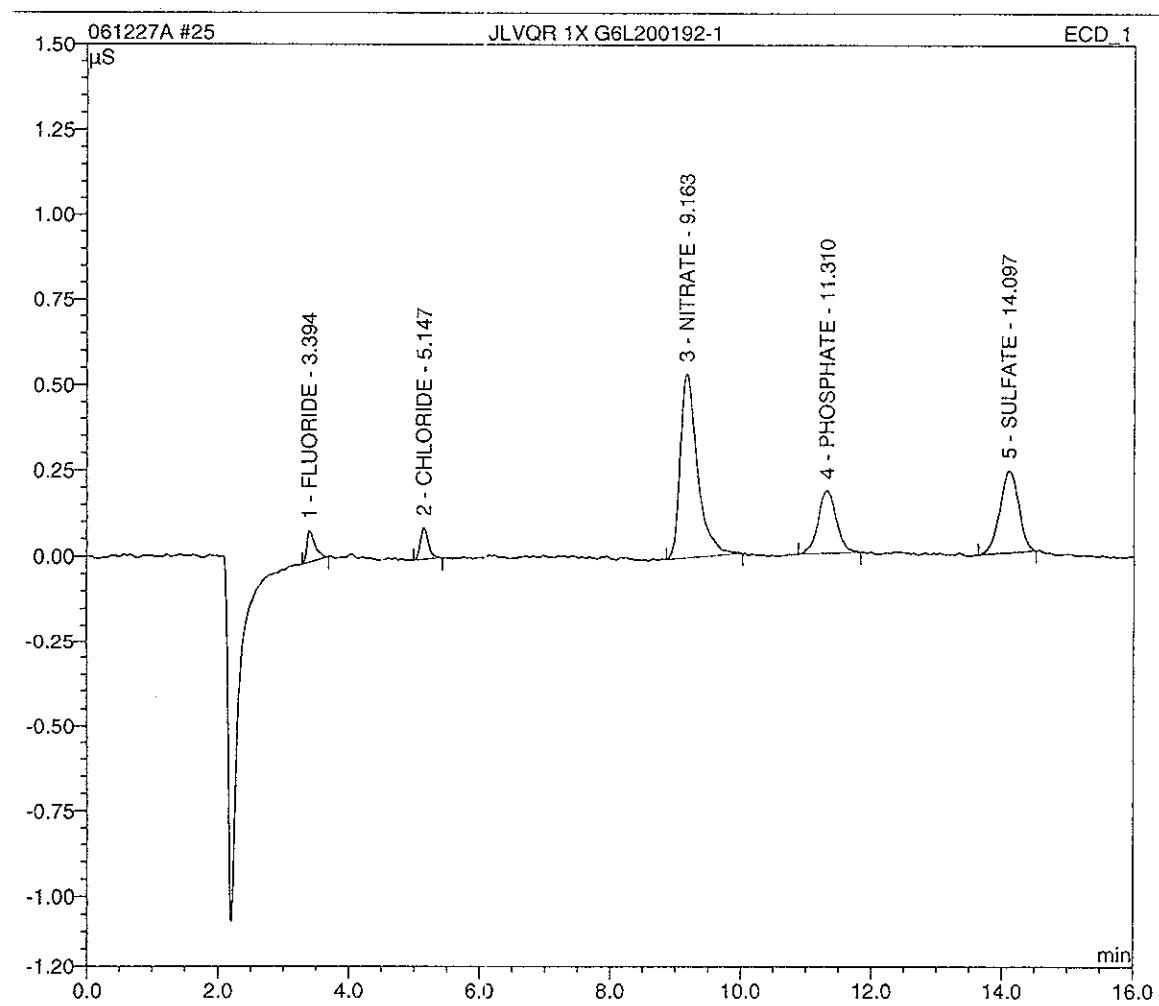
Sample Name:	CCB	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 15:31	Run Time:	16.00

No.	Time min	Peak Name	Type	Area μS*min	Height μS	Amount ppm
		TOTAL:		0.00	0.00	0.00



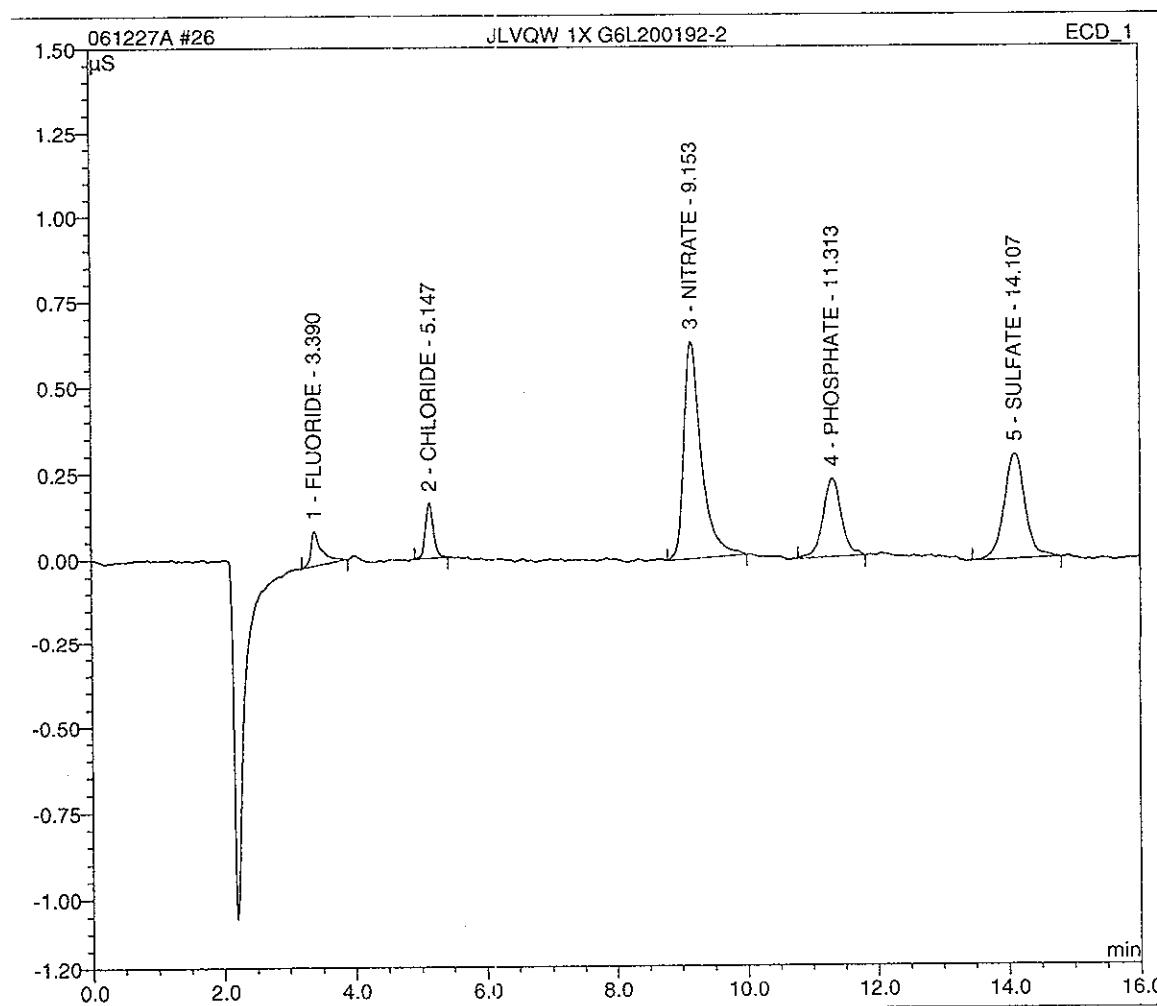
Sample Name:	JLVQR 1X G6L200192-1	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 16:26	Run Time:	16.00

No.	Time min.	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	0.013	0.089	0.0992
2	5.15	CHLORIDE	BMB	0.013	0.090	0.1899
3	9.16	NITRATE	BMB	0.164	0.538	0.5894
4	11.31	PHOSPHATE	BMB	0.059	0.183	0.5686
5	14.10	SULFATE	BMB	0.081	0.239	0.8731
TOTAL:				0.33	1.14	2.32



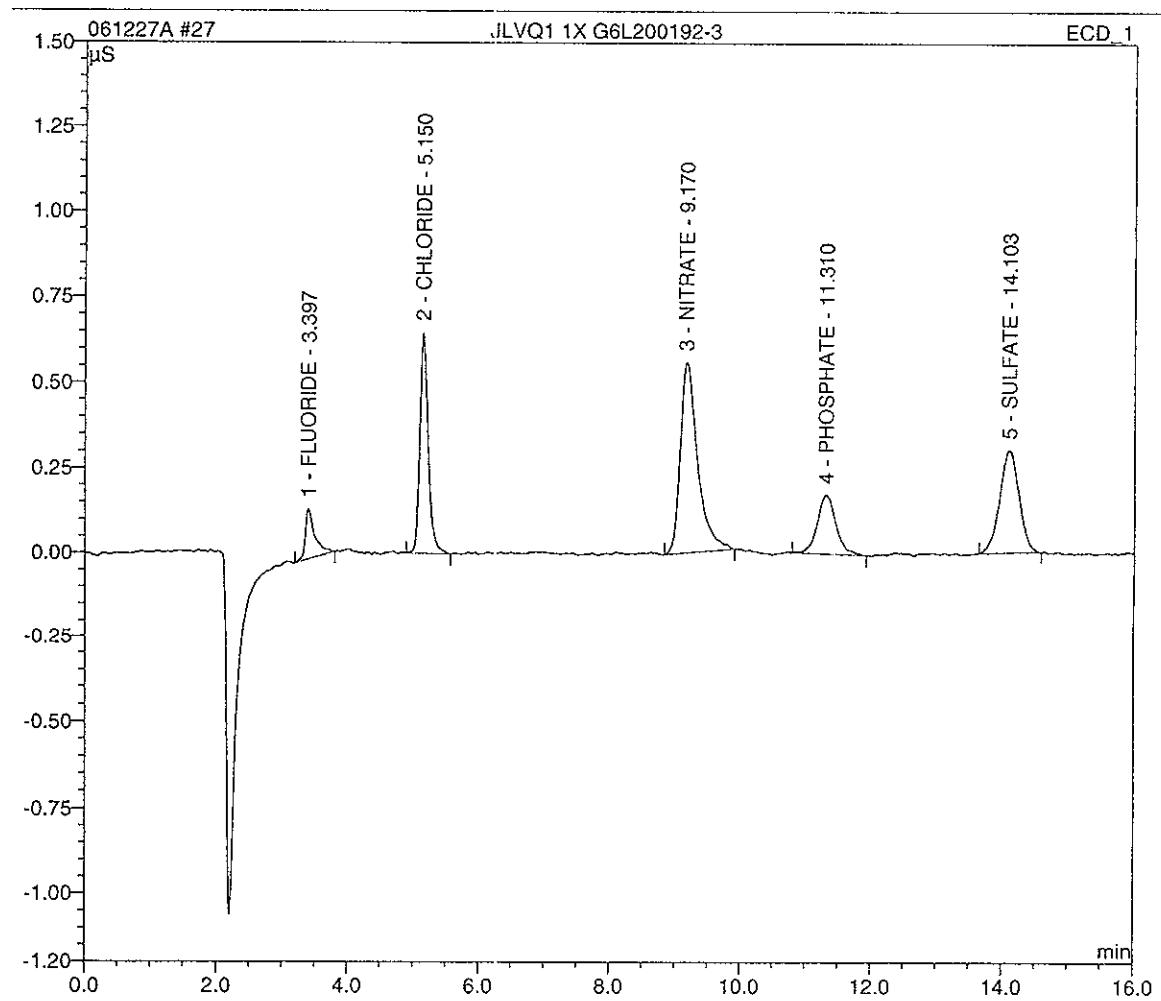
Sample Name:	JLVQW 1X G6L200192-2	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 16:45	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	0.019	0.101	0.1415
2	5.15	CHLORIDE	BMB	0.023	0.161	0.2688
3	9.15	NITRATE	BMB	0.195	0.631	0.7016
4	11.31	PHOSPHATE	BMB	0.075	0.230	0.7208
5	14.11	SULFATE	BMB	0.113	0.306	↓ 1.2222
TOTAL:				0.43	1.43	3.05



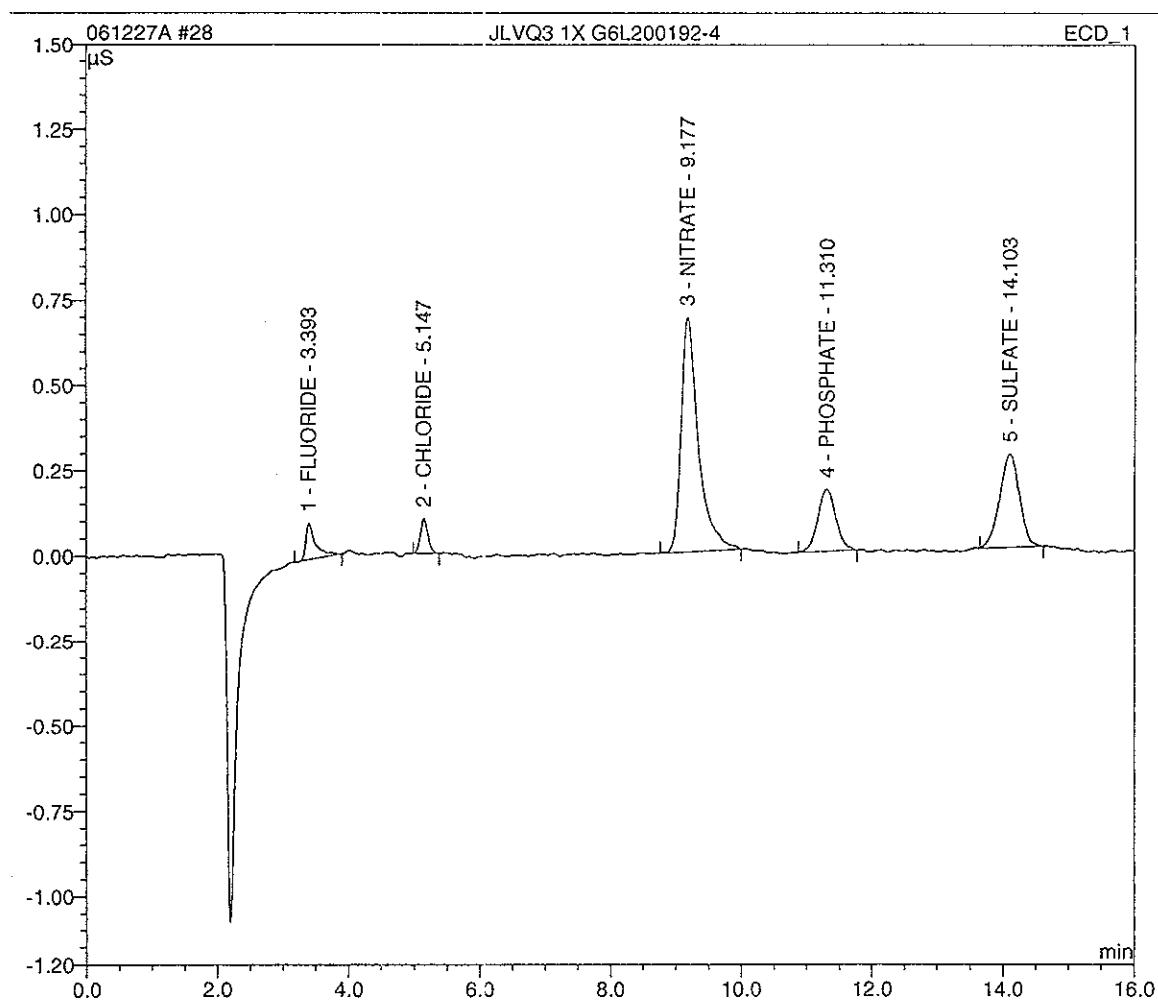
Sample Name:	JLVQ1 1X G6L200192-3	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 17:03	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}^*\text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.40	FLUORIDE	BMB	0.025	0.147	0.1778
2	5.15	CHLORIDE	BMB	0.095	0.646	0.8331
3	9.17	NITRATE	BMB	0.171	0.558	0.6139
4	11.31	PHOSPHATE	BMB	0.058	0.173	0.5597
5	14.10	SULFATE	BMB	0.104	0.301	1.1185
TOTAL:				0.45	1.82	3.30



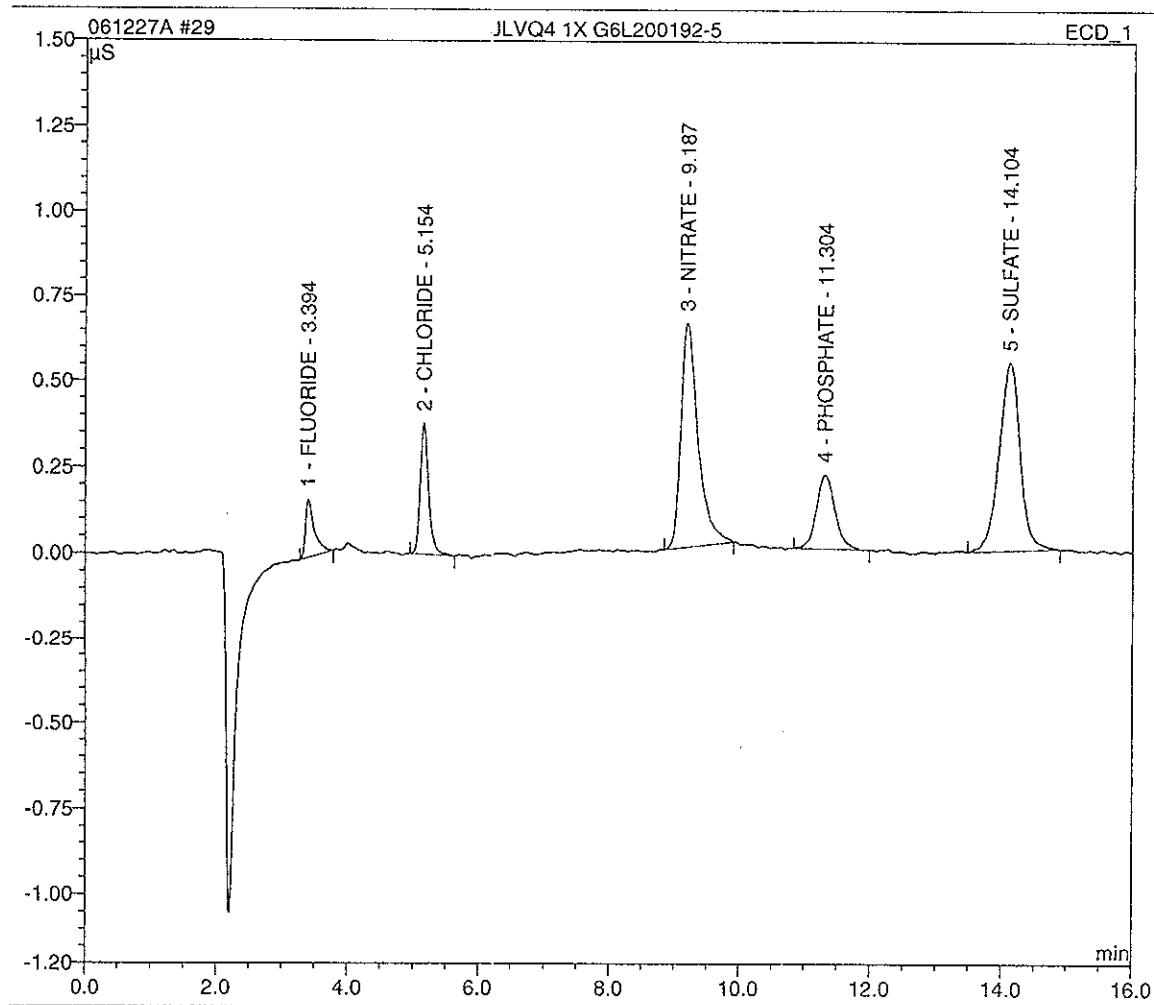
Sample Name:	JLVQ3 1X G6L200192-4	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 17:22	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	0.018	0.103	0.1329
2	5.15	CHLORIDE	BMB	0.013	0.100	0.1951
3	9.18	NITRATE	BMB	0.212	0.687	0.7608
4	11.31	PHOSPHATE	BMB	0.057	0.180	0.5475
5	14.10	SULFATE	BMB	0.094	0.273	1.0176
TOTAL:				0.40	1.34	2.65



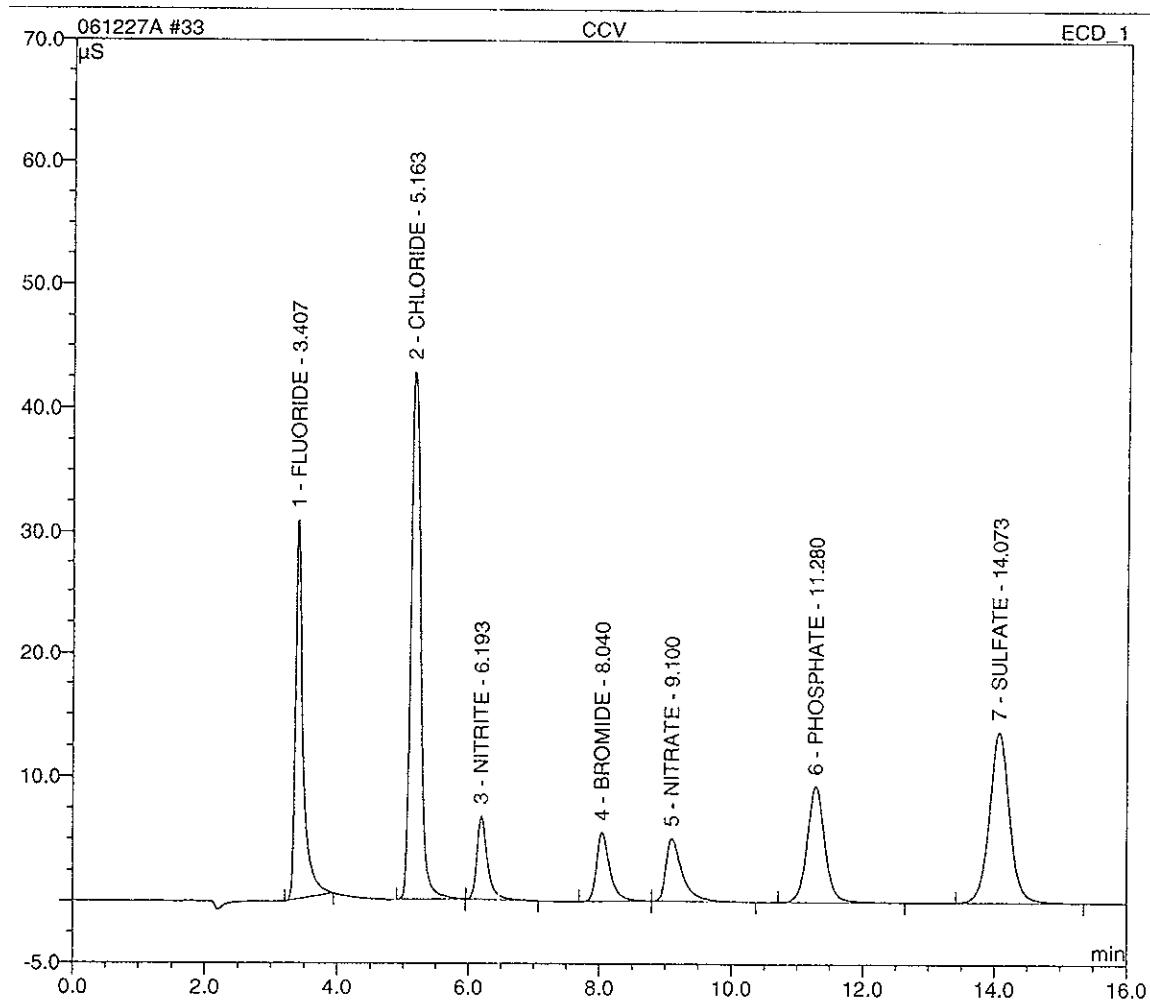
Sample Name:	JLVQ4 1X G6L200192-5	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 17:40	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	0.027	0.168	0.1869
2	5.15	CHLORIDE	BMB	0.056	0.380	0.5297
3	9.19	NITRATE	BMB	0.200	0.654	0.7173
4	11.30	PHOSPHATE	BMB	0.071	0.217	0.6766
5	14.10	SULFATE	BMB	0.204	0.549	2.2265
TOTAL:				0.56	1.97	4.34



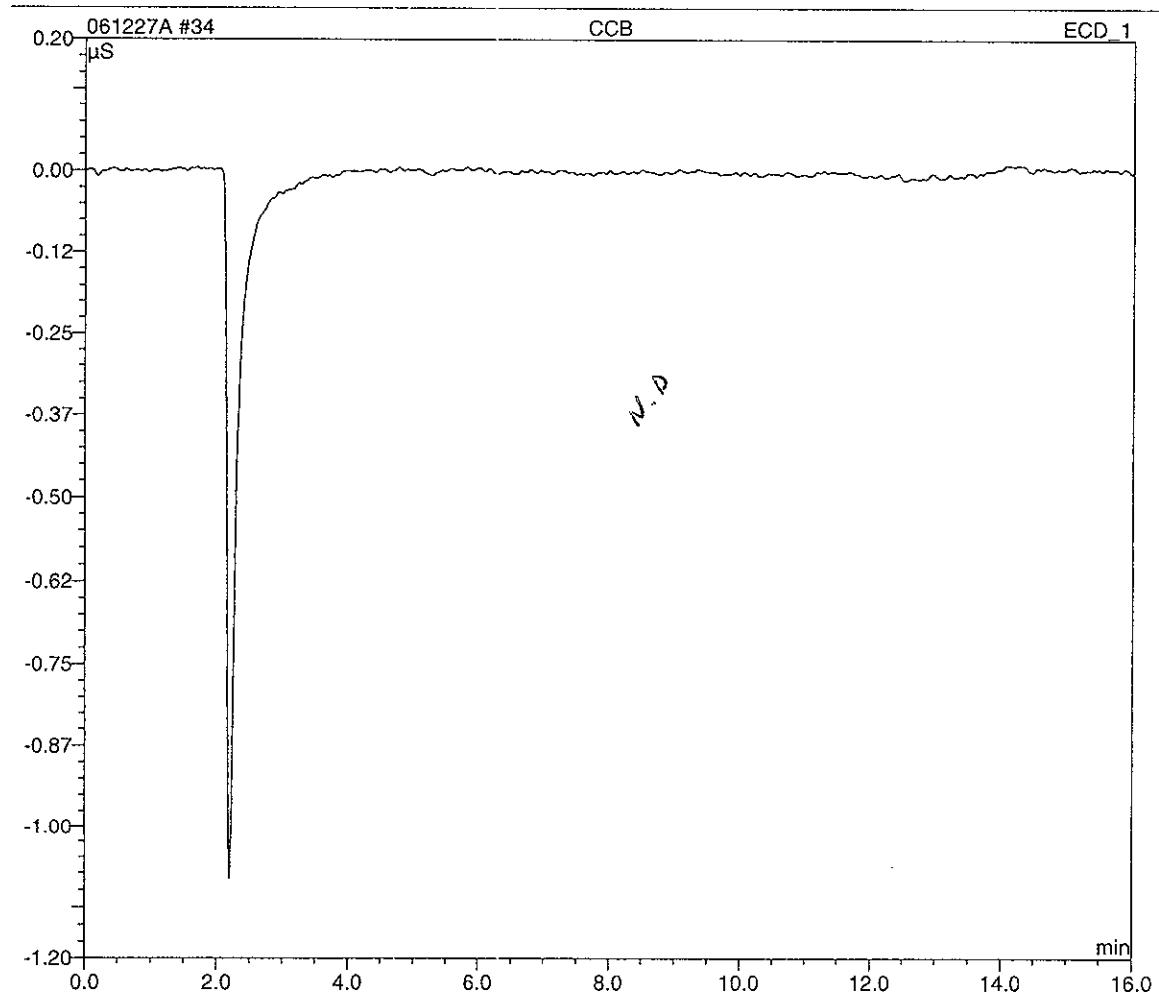
Sample Name:	CCV	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 18:54	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.41	FLUORIDE	BMB	4.078	30.803	24.9560
2	5.16	CHLORIDE	BMB	7.471	42.760	51.0394
3	6.19	NITRITE	BMB	1.273	6.698	5.0358
4	8.04	BROMIDE	BMB	1.299	5.544	25.0489
5	9.10	NITRATE	bMB	1.463	5.057	4.9981
6	11.28	PHOSPHATE	BMB	2.924	9.314	24.8901
7	14.07	SULFATE	BMB	4.878	13.750	50.0163
TOTAL:				23.39	113.93	185.98



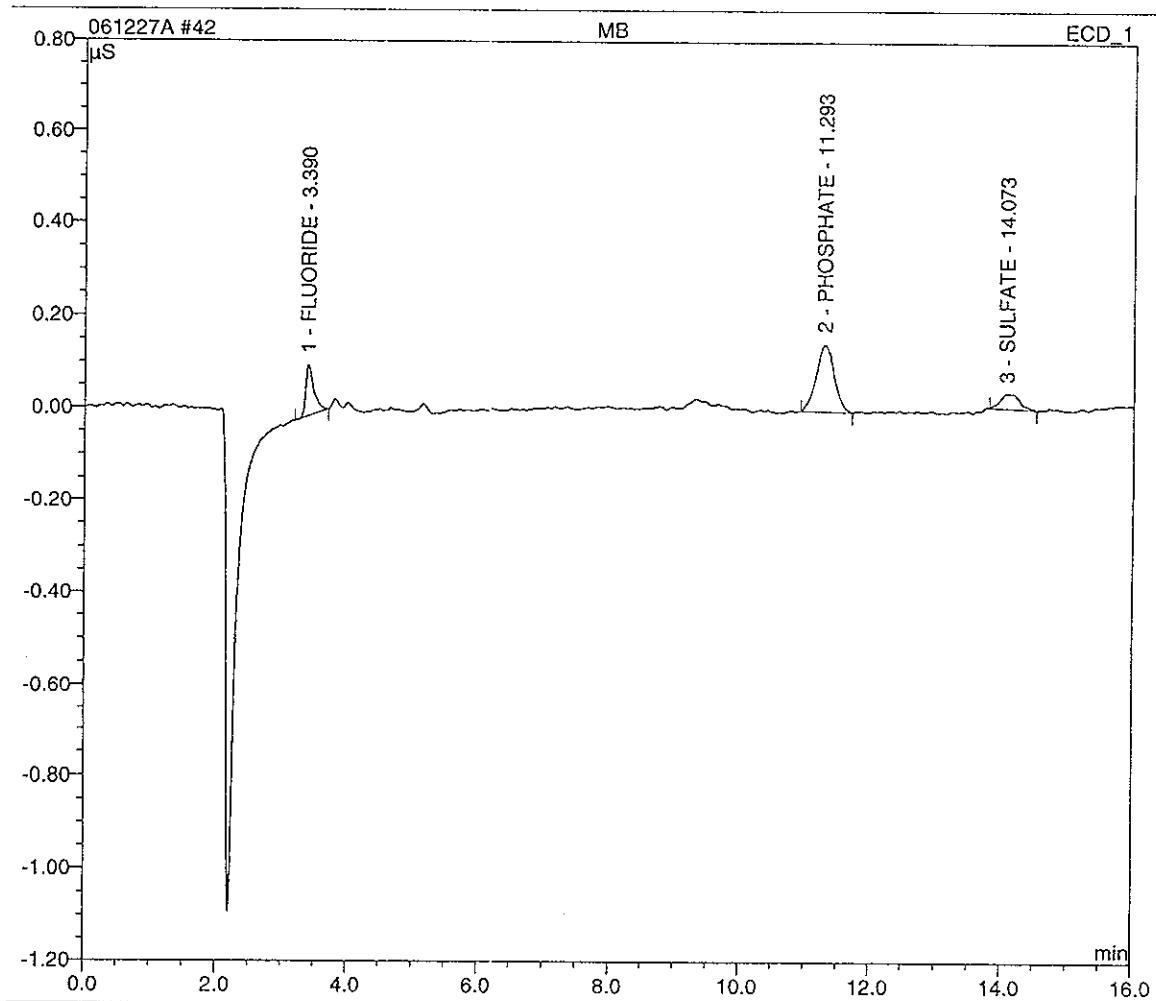
Sample Name:	CCB	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 19:13	Run Time:	16.00

No.	Time min	Peak Name	Type	Area μS*min	Height μS	Amount ppm
		TOTAL:		0.00	0.00	0.00



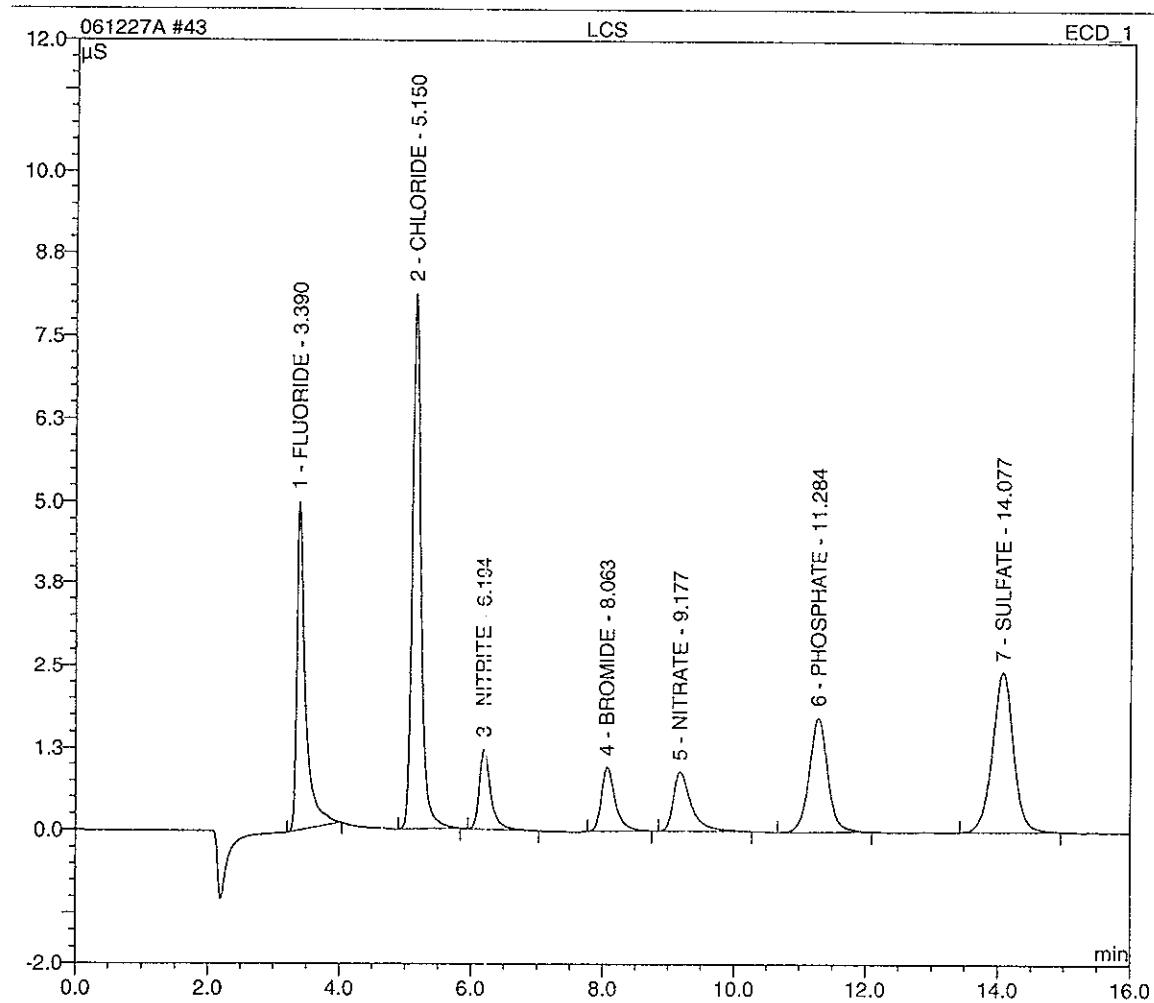
Sample Name:	MB	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 21:41	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	0.016	0.111	0.1191
2	11.29	PHOSPHATE	BMB	0.047	0.146	0.4507
3	14.07	SULFATE	BMB	0.012	0.033	0.0977
TOTAL:				0.07	0.29	0.67



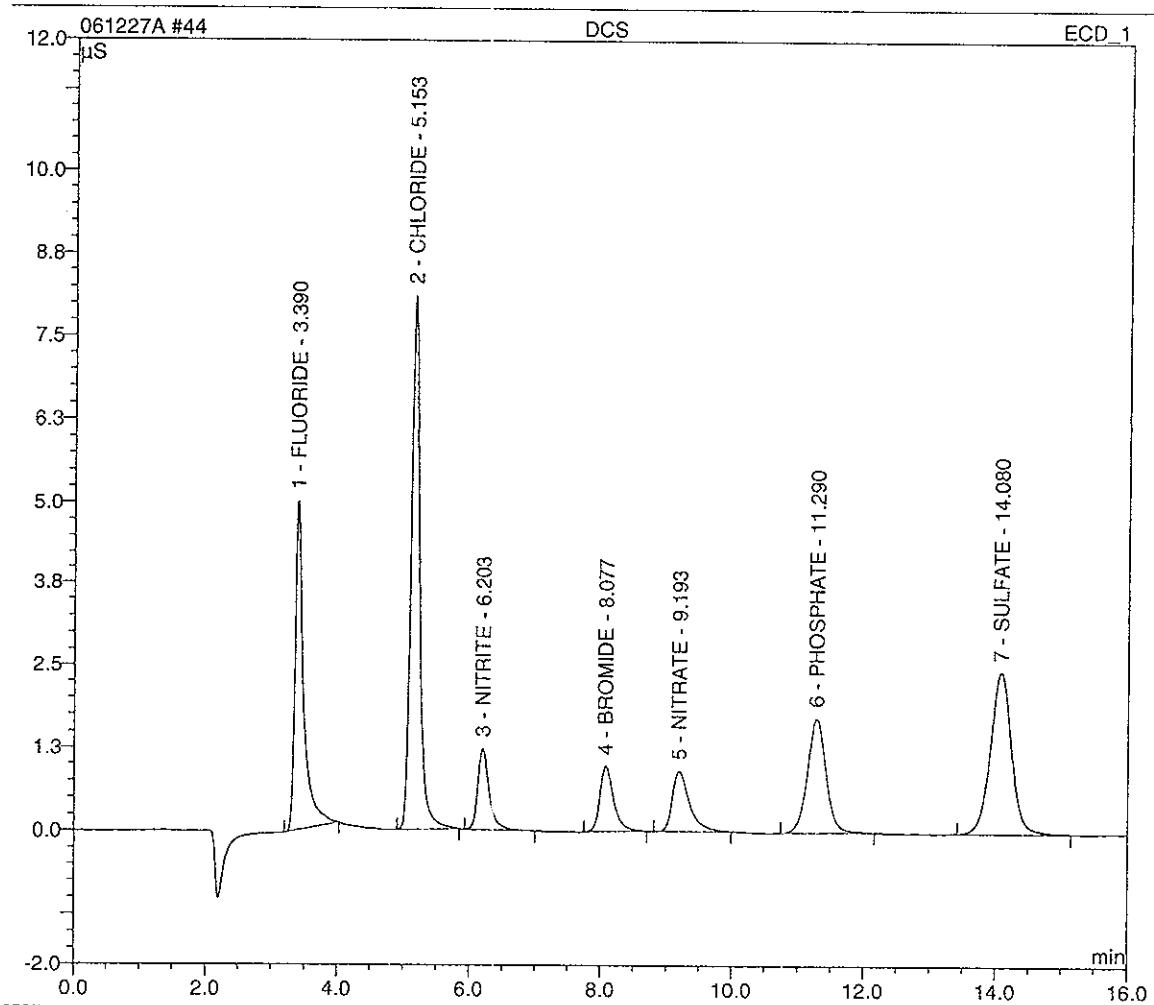
Sample Name:	LCS	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 21:59	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	0.744	5.007	4.7609
2	5.15	CHLORIDE	BMB	1.239	8.125	9.5412
3	6.19	NITRITE	BMB	0.247	1.229	1.0151
4	8.06	BROMIDE	BMB	0.241	0.976	4.8485
5	9.18	NITRATE	BMB	0.285	0.903	1.0165
6	11.28	PHOSPHATE	BMB	0.566	1.732	5.2280
7	14.08	SULFATE	BMB	0.896	2.436	9.7680
TOTAL:				4.22	20.41	36.18



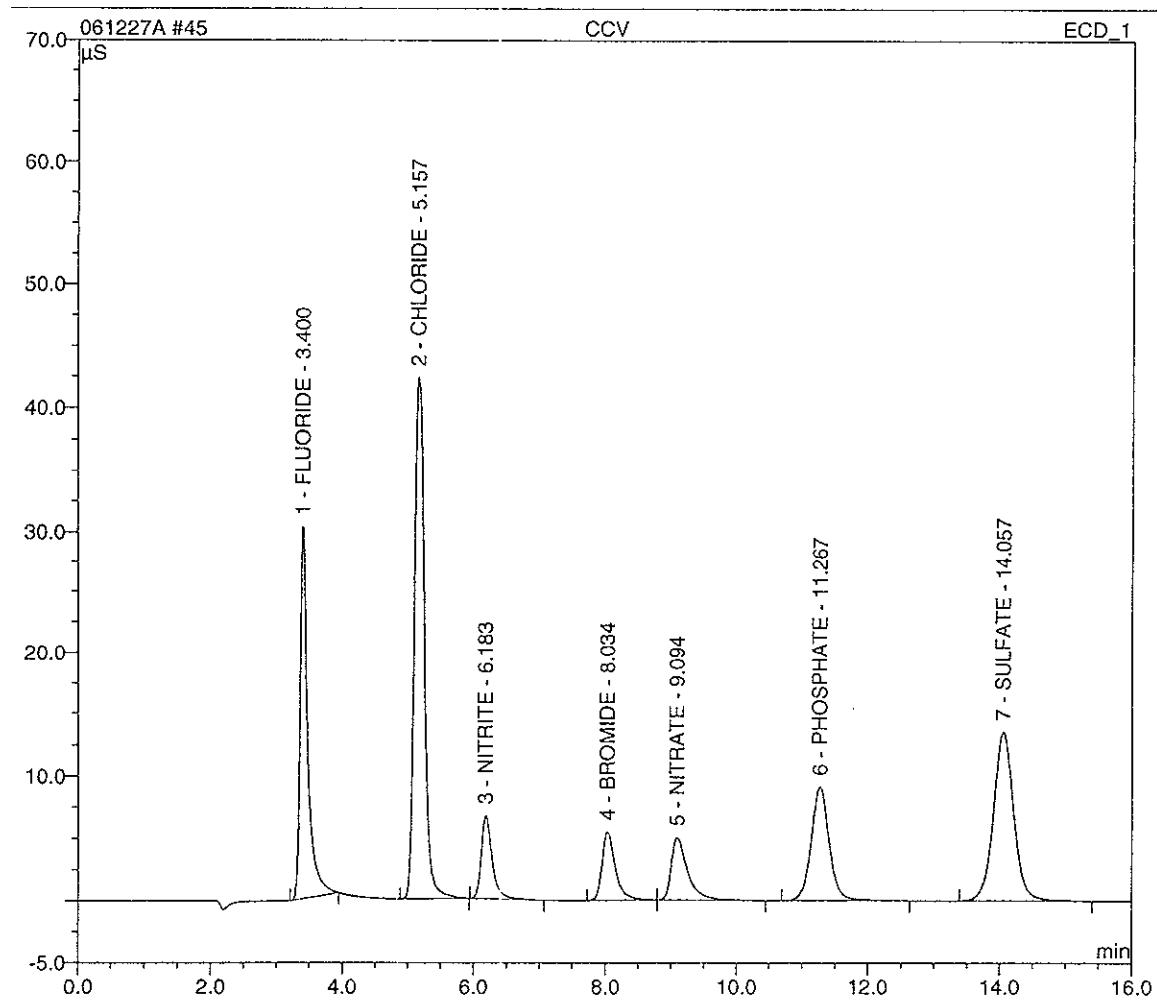
Sample Name:	DCS	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 22:18	Run Time:	16.01

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.39	FLUORIDE	BMB	0.743	5.009	4.7577
2	5.15	CHLORIDE	BMB	1.240	8.085	9.5498
3	6.20	NITRITE	BMB	0.245	1.220	1.0086
4	8.08	BROMIDE	BMB	0.242	0.976	4.8647
5	9.19	NITRATE	BMB	0.274	0.897	0.9791
6	11.29	PHOSPHATE	BMB	0.563	1.715	5.2018
7	14.08	SULFATE	BMB	0.902	2.434	9.8353
TOTAL:				4.21	20.34	36.20



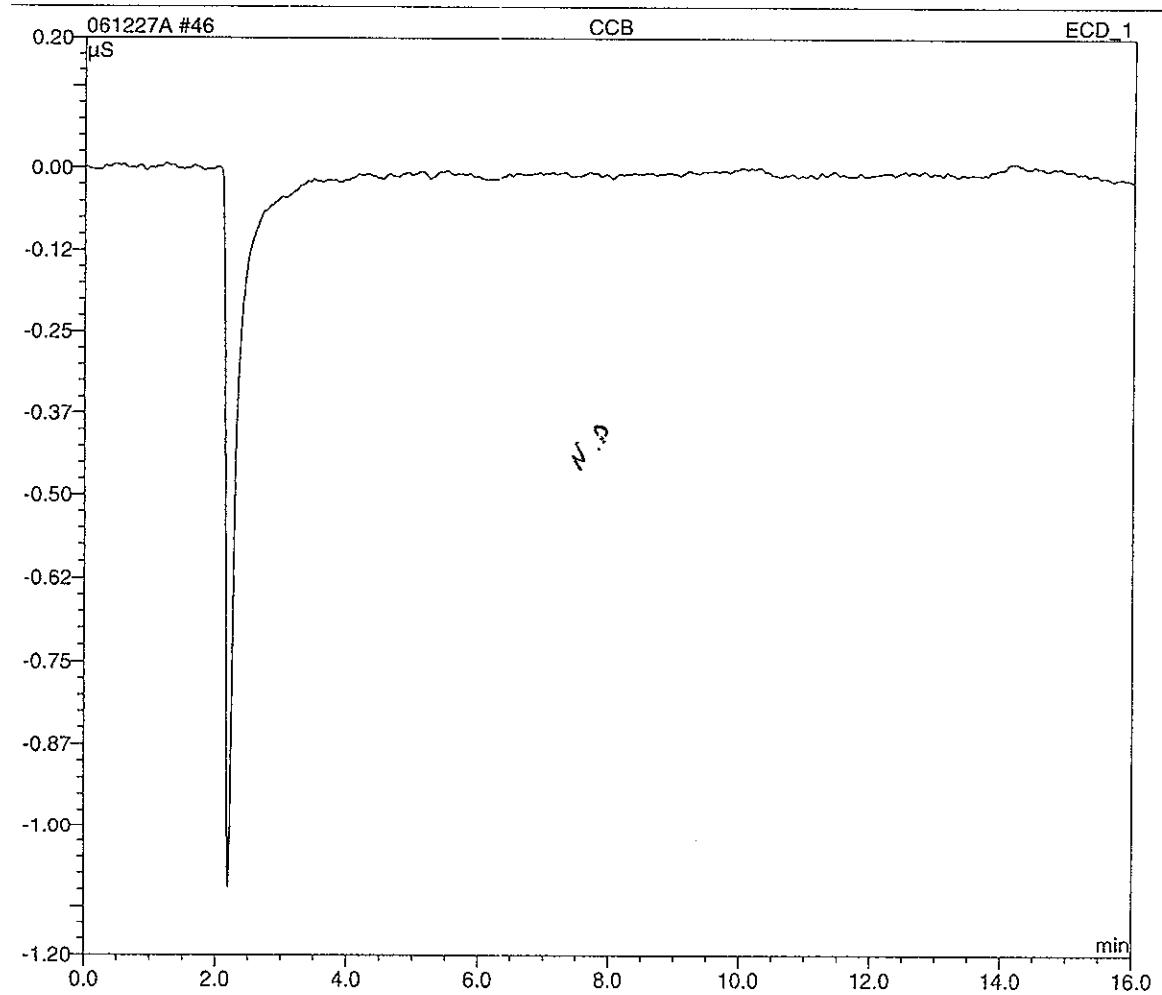
Sample Name:	CCV	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 22:36	Run Time:	16.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height $\mu\text{S}$	Amount ppm
1	3.40	FLUORIDE	BMB	4.012	30.234	24.5718
2	5.16	CHLORIDE	BMB	7.424	42.223	50.7560
3	6.18	NITRITE	BMB	1.270	6.625	5.0260
4	8.03	BROMIDE	BMb	1.295	5.475	24.9656
5	9.09	NITRATE	bMB	1.461	5.002	4.9920
6	11.27	PHOSPHATE	BMB	2.903	9.121	24.7287
7	14.06	SULFATE	BMB	4.857	13.531	49.8232
TOTAL:				23.22	112.21	184.86



Sample Name:	CCB	Inj. Vol.:	100.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	AS14A PROGRAM	Operator:	ounis
Inj. Date/Time:	27.12.06 22:55	Run Time:	16.00

No.	Time min	Peak Name	Type	Area μS·min	Height μS	Amount ppm
		TOTAL:		0.00	0.00	0.00



# AIR, PM-10 & TSP

RQC050

Severn Trent Laboratories, Inc.  
WET CHEM BATCHSHEET

Run Date: 1/02/07

Time: 14:23:09

STL Sacramento

## PRODUCTION FIGURES - WET CHEM

<u>TOTAL NUMBER</u>	<u>SAMPLE NUMBER</u>	<u>QC</u>	<u>RE-RUN MATRIX</u>	<u>RE-RUN OTHER</u>	<u>MISC NUMBER</u>	<u>TOTAL HOURS</u>	<u>EXPANDED DELIVERABLE</u>
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METHOD: JR Particulate Matter as PM10 "PM10 HiVol" (CFR50-J)  
 QC BATCH #: 7002322 INITIALS: SL DATA ENTRY:  
 PREP DATE: 12/21/06 17:43 PREP SL INITIALS SL  
 COMP DATE: 12/22/06 11:14 ANAL SL DATE 1/2/07  
 USER: VALMORES

<u>Work Order</u>	<u>Lab Number</u>	<u>Structured Analysis</u>	<u>Exp. Del.</u>	<u>Analysis Date</u>	<u>Sample ID:</u>
✓JLVQR-1-AA	G-6L200192-001	XX S 88 CR 01	Y-D	12/22/06	P-0812
✓JLVQW-1-AA	G-6L200192-002	XX S 88 CR 01	Y-D		P-0813
✓JLVQ1-1-AA	G-6L200192-003	XX S 88 CR 01	Y-D		P-0814
✓JLVQ3-1-AA	G-6L200192-004	XX S 88 CR 01	Y-D		P-0815
✓JLVRA-1-AA	G-6L200196-001	XX S 88 CR 01	Y-D		P-0820
✓JLVRF-1-AA	G-6L200196-002	XX S 88 CR 01	Y-D		P-0821
✓JLVRL-1-AA	G-6L200196-003	XX S 88 CR 01	Y-D		P-0822
✓JLVRN-1-AA	G-6L200196-004	XX S 88 CR 01	Y-D		P-0824 *
✓JLVVG-1-AA	G-6L200199-001	XX S 88 CR 01	Y-D		P-0816
✓JLVVJ-1-AA	G-6L200199-002	XX S 88 CR 01	Y-D		P-0817
✓JLVVK-1-AA	G-6L200199-003	XX S 88 CR 01	Y-D		P-0818
✓JLVVL-1-AA	G-6L200199-004	XX S 88 CR 01	Y-D		P-0819

Control Limits

**STL Sacramento**  
**Air Toxics Laboratory**

**SEVERN  
TRENT**

**STL**

*KMD*

**PARTICULATE ANALYSIS**

**LEVEL 1 & 2 REVIEW CHECKLIST**

LAB NUMBERS: G6L200192-K6L200196/G6L200199 Batch #: 7002322

ANALYSIS: (circle) TSP/PM10 or METHOD 5

DATE: 1/21/07

ANALYST: S. Valmores

**LEVEL 1 ANALYSIS REVIEW**

1. Samples are in good condition.
2. Sample filter number matches the folder or petri ID number.
3. Desiccator temperature and % humidity criteria in control.
4. Balance calibration criteria met.
5. Beginning and ending calibration sample bracket weights are in calibration.
6. Samples reached stable weight.
7. Samples exceeded 5 consecutive final weighings.

YES	NO	NA
✓		
✓		
✓		
✓		
✓		
		✓

**LEVEL 1 DATA REVIEW**

1. Benchsheet is complete.
2. QAS or QAPP consulted and followed for client specifics.
3. Data entered in properly.
4. Copy of spreadsheet or logbook raw data entry attached to data package.
5. Analyst observations, HTV's, Anomalies properly documented and attached to data package.

✓		
✓		
✓		
✓		
		✓

Completed By & Date: SJ 1/21/07

**LEVEL 2 REVIEW:**

1. Level 1 checklist complete and verified.
2. Deviations, Anomalies, Holding times checked and approved.
3. Reanalysis documented and chemist notified.
4. Client specific criteria met.
5. Data entry checked and released in Quantims.
6. Indication on benchsheet or spreadsheet on review and released (dated & signed).

✓		
✓		
		✓
✓		
✓		
✓		

Completed By & Date: SJ 1/15/07

Comments: des IA

Severn Trent Laboratories  
AIR TOXICS GRAVIMETRIC ANALYSES

WEST SACRAMENTO

Lab ID	Filter ID	Initial Weight (g) date/time initials	Initial Weight (g) date/time initials	Final Weight (g) date/time initials	Wt of Particulate (g)			
5 g wt	4.9996	5.0000	4.9995	4.9997				-0.0003
JKRXD bcpm110206-811	4.1270	4.1270	4.1412	4.1398	4.1403			0.0133
JLVQR bcpm110206-812	4.1335	4.1335	4.1390	4.1395				0.0060
JLVQW bcpm110206-813	4.1458	4.1462	4.1529	4.1533				0.0071
JLVQ1 bcpm110206-814	4.1277	4.1282	4.1465	4.1469				0.0187
JLVQ3 bcpm110206-815	4.1358	4.1362	4.1442	4.1446				0.0084
JLVQG bcpm110206-816	4.1333	4.1333	4.1486	4.1490				0.0157
JLWJ bcpm110206-817	4.1431	4.1428	4.1672	4.1676				0.0248
JLVK bcpm110206-818	4.1444	4.1441	4.1737	4.1741				0.0300
JLVM bcpm110206-819	4.1412	4.1410	4.1333	4.1331				-0.0079
JLVR A bcpm110206-820	4.1526	4.1527	4.1589	4.1585				0.0058
	5 g wt	4.9995	4.9997	5.0000	4.9995	4.9999		0.0002
	5 g wt	4.9995	4.9997	4.9999	4.9997			0.0000
JLVR E bcpm110206-821	4.1469	4.1470	4.1529	4.1527				0.0057
JLVR L bcpm110206-822	4.1541	4.1536	4.1696	4.1693				0.0157
bcpm110206-823	4.1650	4.1650						NC

Severn Trent Laboratories  
AIR TOXICS GRAVIMETRIC ANALYSES

WEST SACRAMENTO

Lab ID	Filter ID	Initial Weight (g) date/time initials	Initial Weight (g) date/time initials	Final Weight (g) date/time initials	Wt of Particulate (g)			
JLVRN	bcpm110206-824	4.1599 110206skv1611	4.1595 110306skv1238	4.1526 122106skv1752	4.1521 122206skv1114			-0.0074
	bcpm110206-825	4.1701 110206skv1612	4.1701 110306skv1239					NC
	5 g wt	4.9997 110206skv1612	4.9995 110306skv1239	4.9997 122106skv1753	5.0000 122206skv1114			0.0005

PDE115

Severn Trent Laboratories, Inc.  
Inorganics Batch Review  
QC Batch 7002322

Date 1/15/2007  
Time 16:59:32

Method Code: JR Particulate Matter as PM10 "Hivol" (CFR50-J)  
Analyst: Steve Valmores

Work Order	Result	Units	LDL/Dil	Prep.: Anal.	Total Solids	PSRL N	Flag R/R	Rounded Output LDL	Dil.
JLVQR-1-AA	0.0060	g	0.0001	12/21-12/22/06	.00	N	R	0.0001	1.00
JLVQW-1-AA	0.0071	g	0.0001	12/21-12/22/06	.00	N	R	0.0071	0.0001
JLVQ1-1-AA	0.0187	g	0.0001	12/21-12/22/06	.00	N	R	0.0187	0.0001
JLVQ3-1-AA	0.0084	g	0.0001	12/21-12/22/06	.00	N	R	0.0084	0.0001
JLVRA-1-AA	0.0058	g	0.0001	12/21-12/22/06	.00	N	R	0.0058	0.0001
JLVRF-1-AA	0.0057	g	0.0001	12/21-12/22/06	.00	N	R	0.0057	0.0001
JLVRL-1-AA	0.0157	g	0.0001	12/21-12/22/06	.00	N	R	0.0157	0.0001
JLVRN-1-AA	ND	g	0.0001	12/21-12/22/06	.00	N	R	ND	1.00
JLIVVG-1-AA	0.0157	g	0.0001	12/21-12/22/06	.00	N	R	0.0157	0.0001
JLIVVJ-1-AA	0.0248	g	0.0001	12/21-12/22/06	.00	N	R	0.0248	0.0001
JLIVVK-1-AA	0.0300	g	0.0001	12/21-12/22/06	.00	N	R	0.0300	0.0001
JLIVVL-1-AA	ND	g	0.0001	12/21-12/22/06	.00	N	R	ND	0.0001

Notes:

TEST	TOTAL #	SAMPLE #	PRODUCTION TOTALS	MATRIX #	OTHER #	MISC #	HOURS
	0	0	0	0	0	0	.0

RQC050

Severn Trent Laboratories, Inc.  
WET CHEM BATCHSHEETRun Date: 1/02/07  
Time: 14:23:22

STL Sacramento

## PRODUCTION FIGURES - WET CHEM

<u>TOTAL NUMBER</u>	<u>SAMPLE NUMBER</u>	<u>RE-RUN QC</u>	<u>RE-RUN MATRIX</u>	<u>MISC OTHER</u>	<u>TOTAL HOURS</u>	<u>EXPANDED DELIVERABLE</u>

METHOD: AO Particulates in Air, Suspended "TSP HiVol" (APP B)  
 QC BATCH #: 7002321 INITIALS: SL DATA ENTRY: SL  
 PREP DATE: 12/21/06 17:40 PREP INITIALS SL  
 COMP DATE: 12/22/06 11:05 ANAL INITIALS SL  
 USER: VALMORES DATE 1/2/07

<u>Work Order</u>	<u>Lab Number</u>	<u>Structured Analysis</u>	<u>Exp. Del.</u>	<u>Analysis Date</u>	<u>Sample ID:</u>
✓JLVQ4-1-AA	G-6L200192-005	XX S 88 AO 3W	Y-D	<u>12/22/06</u>	000580
✓JLVRQ-1-AA	G-6L200196-005	XX S 88 AO 3W	Y-D	<u> </u>	P-0582
✓JLVVM-1-AA	G-6L200199-005	XX S 88 AO 3W	Y-D	<u> </u>	000581

## Control Limits

**PARTICULATE ANALYSIS**

**LEVEL 1 & 2 REVIEW CHECKLIST**

LAB NUMBERS: G6L200192 / G6L200196 / G6L200199  
 Batch #: 7002 321

ANALYSIS: (circle) TSP/PM10 or METHOD 5

DATE: 1/2/06

ANALYST: S Valmores

**LEVEL 1 ANALYSIS REVIEW**

1. Samples are in good condition.
2. Sample filter number matches the folder or petri ID number.
3. Desiccator temperature and % humidity criteria in control.
4. Balance calibration criteria met.
5. Beginning and ending calibration sample bracket weights are in calibration.
6. Samples reached stable weight.
7. Samples exceeded 5 consecutive final weighings.

YES	NO	NA
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**LEVEL 1 DATA REVIEW**

1. Benchsheet is complete.
2. QAS or QAPP consulted and followed for client specifics.
3. Data entered in properly.
4. Copy of spreadsheet or logbook raw data entry attached to data package.
5. Analyst observations, HTV's, Anomalies properly documented and attached to data package.

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Completed By & Date: SV 1/2/06

**LEVEL 2 REVIEW:**

1. Level 1 checklist complete and verified.
2. Deviations, Anomalies, Holding times checked and approved.
3. Reanalysis documented and chemist notified.
4. Client specific criteria met.
5. Data entry checked and released in Quantims.
6. Indication on benchsheet or spreadsheet on review and released (dated & signed).

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Completed By & Date: G6L 1/15/07

Comments: des 1A

Severn Trent Laboratories  
AIR TOXICS GRAVIMETRIC ANALYSES

WEST SACRAMENTO

Lab ID	Filter ID	Initial Weight (g) date/time initials	Initial Weight (g) date/time initials	Final Weight (g) date/time initials	Wt of Particulate (g)			
5 g wt	5.0001 110206skv1546	5.0000 110306skv1213	4.9998 122106skv1740	4.9995 122206skv1104				-0.0005
JJ573	bctsp110206-576	4.3116 110206skv1547	4.3119 110306skv1214	4.3360 112806skv1615	4.3340 112906skv1728	4.3340 113006skv1607		0.0221
	bctsp110206-577	4.3083 110206skv1547	4.2971 110306skv1214	4.3341 112806skv1616	4.3309 112906skv1729	4.3307 113006skv1608		0.0336
JJ8VV	bctsp110206-578	4.2968 110206skv1547	4.2971 110306skv1214	4.3341 112806skv1616	4.3309 112906skv1729	4.3307 113006skv1608		0.0368
JKRXE	bctsp110206-579	4.3084 110206skv1548	4.3085 110306skv1215	4.3466 120706skv1022	4.3452 120806skv1003	4.3453 121106skv1017		0.0462
JLVQ4	bctsp110206-580	4.3133 110206skv1548	4.3138 110306skv1215	4.3601 122106skv1741	4.3601 122206skv1104			0.0540
JLVM	bctsp110206-581	4.2951 110206skv1549	4.2955 110306skv1216	4.3495 122106skv1742	4.3495 122206skv1105			0.0441
JLVRQ	bctsp110206-582	4.2959 110206skv1549	4.2964 110306skv1216	4.3410 122106skv1742	4.3405 122206skv1105			
	bctsp110206-583	4.2910 110206skv1549	4.2915 110306skv1217					NC
	bctsp110206-584	4.2971 110206skv1550	4.2971 110306skv1217					NC
	bctsp110206-585	4.2785 110206skv1550	4.2790 110306skv1218					NC
	5 g wt	4.9997 110206skv1550	5.0000 110306skv1218	4.9998 112806skv1617	5.0002 112906skv1729	5.0001 113006skv1608		0.0001
	5 g wt	4.9997 110206skv1550	5.0000 110306skv1218	5.0000 120706skv1023	4.9995 120806skv1003	5.0001 121106skv1017		-0.0005
	5 g wt	4.9997 110206skv1550	5.0000 110306skv1218	4.9995 122106skv1743	4.9998 122206skv1105			-0.0002

PDE115

Severn Trent Laboratories, Inc.  
Inorganics Batch Review  
QC Batch  
**7002321**

Date 1/15/2007  
Time 17:04:00

Method Code: AO Particulates in Air, Suspended "TSP Hivol" (APP B)  
Analyst: Steve Valmores

Work Order	Result	Units	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Output	Dil.
JLVQ4-1-AA	0.0462	g	0.0001	.00	N	R	0.0462	0.0001
JLVRQ-1-AA	0.0441	g	0.0001	.00	N	R	0.0441	0.0001
JLVVM-1-AA	0.0540	g	0.0001	.00	N	R	0.0540	0.0001

Notes:

TEST

TOTAL #	SAMPLE #	PRODUCTION TOTALS	MATRIX #	OTHER #	MISC #	HOURS
0	0	0	0	0	0	.0